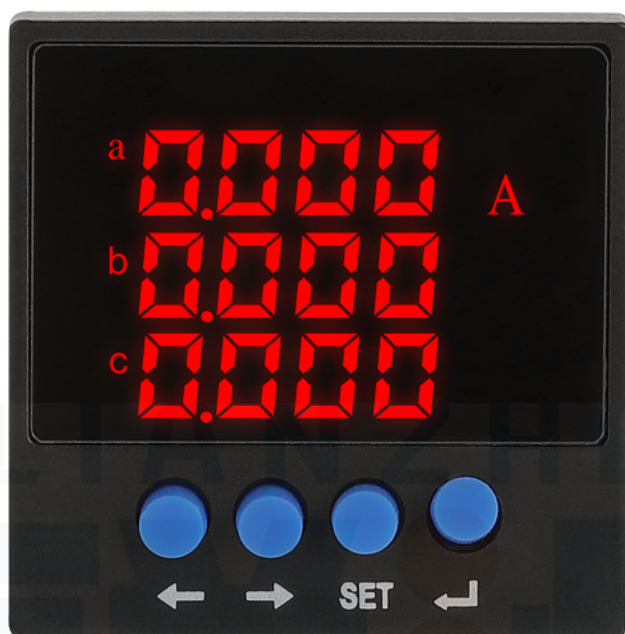


## 一、概述

RC500U-AK4三相数显电压表是一种可编程智能仪表，采用大规模集成电路和亮度、长寿命更长的LED显示，应用数字采样技术，对三相电气线路中的相电压、线电压进行实时测量、显示和控制，并通过RS485接口或模拟量变送输出接口对被测量电压数据进行远传。



## 特点

- ◎真有效值测量、整四位LED/LCD显示
- ◎软件调校、内部无电位器(精度高、稳定性好、长期工作免调校)
- ◎可编程通过面板按键任意调节显示值1~9999

◎可选带通讯功能◎可选一路模拟量输出(DC4-20MA/0-20MA/0-5V)

◎可选带上下限报警控制功能◎可选两路开关量输入

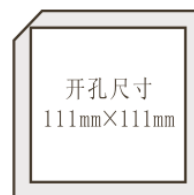
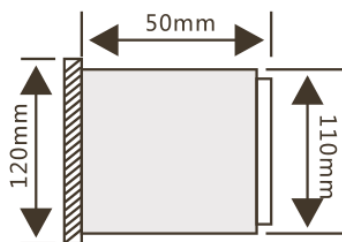
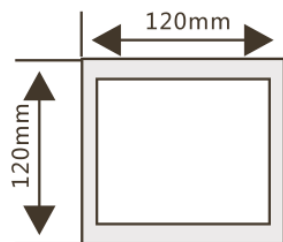
## 二、技术参数与选型

|           |       |                                 |
|-----------|-------|---------------------------------|
| 输入        | 输入    | 电压、电流:请根据实际仪表上面的标称值接入           |
|           | 过载    | 持续1.2倍, 瞬时:电压2倍/1S 电流10倍/5S     |
|           | 扩展    | 配互感器或分流器扩展量程                    |
|           | 过量程显示 | 当前数据+N*9999                     |
|           | 频率    | 50Hz±10%                        |
| 电源        | 电源    | AC220V±10%(45~55Hz)(其它电源订货须说明)  |
|           | 功耗    | <2W                             |
| 显示        | LED   | 四位三排, 显示数据更新时间: 1S              |
|           | 显示    | 9999                            |
| 精度等级      |       | 0.5%                            |
| 隔离耐压      |       | 2KV/50Hz/1min                   |
| 绝缘电阻      |       | ≥100MΩ                          |
| 平均无故障工作时间 |       | ≥50000h                         |
| 工作条件      |       | 环境温度: -25C 55C, 相对湿度≤93%无腐蚀气体场所 |
| 海拔高度      |       | ≤2500m                          |

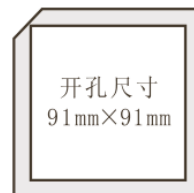
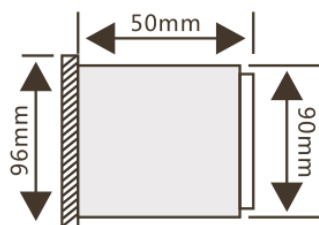
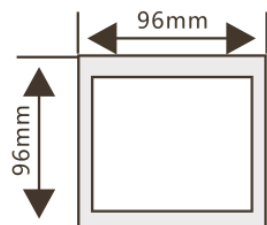
选型表

## 三、外形及安装尺寸

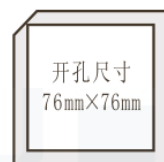
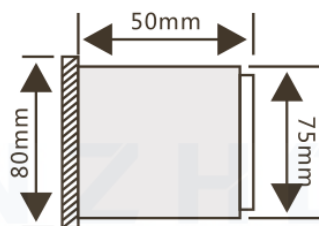
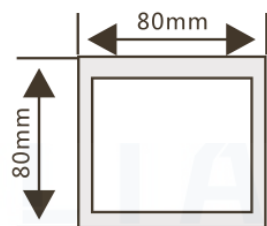
◆ 120mm×120mm



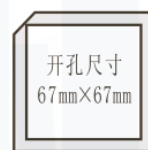
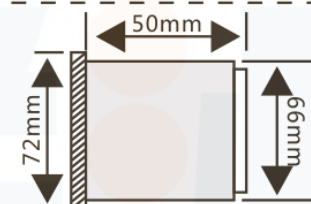
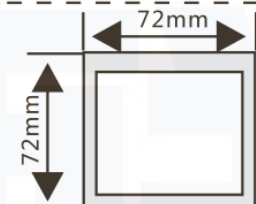
◆ 96mm×96mm



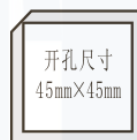
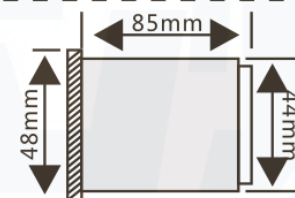
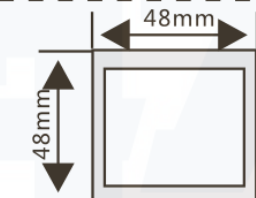
◆ 80mm×80mm



◆ 72mm×72mm

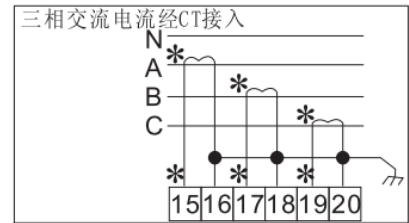
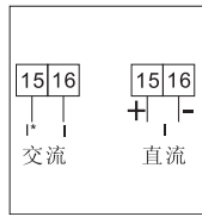
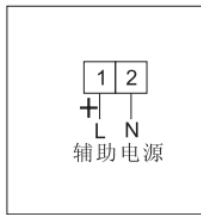


◆ 48mm×48mm

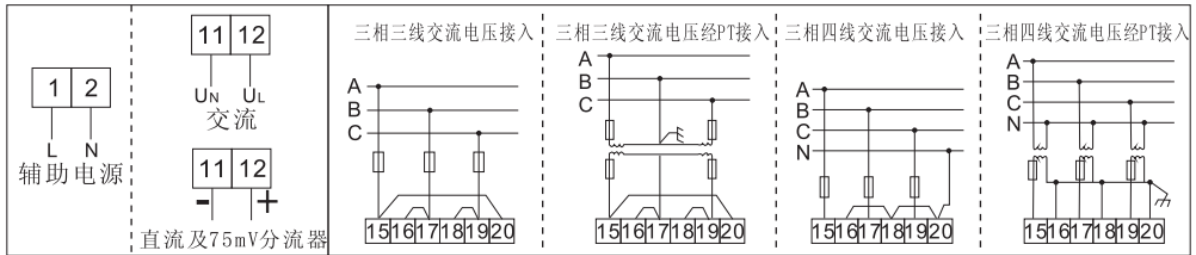


#### 四、接线示意图

◆ 输入电流信号接线



◆ 输入电压信号接线



◆ 扩展功能接线.



五、参数设置流程示意图

Figure 1: Setting menu flowchart. The diagram illustrates the navigation and settings for various parameters across three levels (第一级, 第二级, 第三级).

**Menu Flow:**

- Menu** → **Code** (9999) → **Code** (0001) → **SER** (设置)
- SER** (设置) → **SER** (dISP) → **SER** (bLEd) → **SER** (CLrE) → **InPr** (输入)
- InPr** (输入) → **InPr** (nEr) → **InPr** (UScL) → **InPr** (IScL) → **InPr** (r. U) → **InPr** (r. I) → **Conn** (通讯)
- Conn** (通讯) → **Conn** (Sn) → **Conn** (bAUD) → **Conn** (dAtA) → **Conn** (Pr.of) → **do-1** (开关量)
- do-1** (开关量) → **Ao-1** (模拟量) → **Code** (密码)

**Settings and Descriptions:**

- SER** (设置):
  - Level 2: dISP (电量显示方式: 0-10), bLEd (此项无意义), CLrE (按  $\leftarrow$  电能清零)
- InPr** (输入):
  - Level 2: nEr (信号网络), UScL (电压范围: 100, 400), IScL (电流范围: 1, 5), r. U (电压倍率范围: 0001, 0002), r. I (电流倍率范围: 0001, 0002)
- Conn** (通讯):
  - Level 2: Sn (仪表通讯地址范围: 0001, 0002), bAUD (波特率: 4800, 9600), dAtA (协议格式: n8.1, 2.8.1, a8.1), Pr.of (协议格式: Word, byte)
- do-1** (开关量):
  - Level 2: 0000, 0129, 0129, 0129 (另三路类似)
- Ao-1** (模拟量):
  - Level 2: 0000, 0129, 0129, 0129 (另三路类似)
- Code** (密码):
  - Level 2: Code (0001), Code (n-1), Code (n-2) (密码范围 0~9999)

**Navigation:** Arrows indicate the flow between levels and settings. The **SAVE YES** screen is reached after the **Code** settings.