

## 1 产品概述 Product Summarize

JY-40系列集成电路电压继电器(以下简称产品)用于电机、变压器和输电线的继电保护装置中,作为过电压保护或低电压闭锁的启动元件。本产品主回路由集成电路构成,具有极高准确度和返回系数,且动作速度快,功耗小,整定范围宽,作为欠电压继电器使用时,无振动、触点粘连等现象。采用拨盘数字开关整定,直观方便。具有较高的抗干扰能力和可靠性。在使用时无需考虑串、并联。可以很方便代替DJ-100系列、DY-20C及DY-30系列电压继电器。

JY-40 series integrated circuit voltage relay (for short: the product) are applying for relay protective equipments of motors, transformers and transmission lines as starting elements of voltage protection or low voltage blocking. The product is composed of integrated circuit, has the characteristics of high precision and return coefficient, short operating time, low power consumption, wide setting range, and without dithering or contact adhesion when used as low voltage relays. This series adopt digital driving plate switch setting, is visual and convenient. There is no need of consideration of series or parallel when using. This series can substitute voltage relays such as DJ-100 series, DY-20C and DY-30 series.

## 2 主要技术参数 Main Technological Parameter

- 辅助电压: DC220V,110V,48V;
- 整定范围: 1: 0.1 ~ 9.95V; 2: 0.5~99.5V; 3: 40~160V; 4: 50~199V; 5:80~320V; 6:100~399V
- 整定误差: 不大于  $\pm 2\%$
- 动作分类: 无“U”者为过电压;有“U”者为低电压;
- 触点形式: a. 2动合,0动断; b. 1动合,1动断; c. 0动合,2动断; d. 2动合,1动断;  
e. 1动合,2动断;
- 返回系数: 过电压继电器不小于0.9;欠电压不大于1.15。
- 动作时间: 过电压继电器1.1倍整定值的动作时间不大于15ms,低电压继电器0.5倍整定值的动作值的动作时间不大于30ms。
- 功率消耗: 交流回路功耗小于2VA;直流回路功耗小于5W。
- 触点容量: 在电压不超过250V,电流不超过5A,时间常数为 $5 \pm 0.75\text{ms}$ 的直流有感负荷电路中,产品输出触点的断开容量为50W。输出触点在上述规定的负荷条件下,产品能可靠动作及返回 $5 \times 10^4$ 次。输出触点长期允许接通电流为5A。
- 介质强度: 产品各导电端子连在一起,对外露的非带电金属部分或外壳之间,能承受2000V(有效值)50Hz的交流电压历时1分钟试验而无绝缘击穿或闪络现象。

·Auxiliary voltage: DC 220V, 110V, 48V

·Setting range: 1: 0.1~9.95V; 2: 0.5~99.5V; 3: 40~160V; 4: 50~199V; 5: 80~320V; 6: 100~399V

·Set error:  $\leq \pm 2\%$

·Operation type: Without “U” means over-voltage; with “U” means low voltage

·Contact type: a. 2 move to match, 0 move to break; b. 1 move to match, 1 move to break; c. 0 move to match, 2 move to break; d. 2 move to match, 1 move to break; e. 1 move to match, 2 move to break

·Return coefficient: over-voltage relay  $\geq 0.9$ ; low voltage relay  $\leq 1.15$

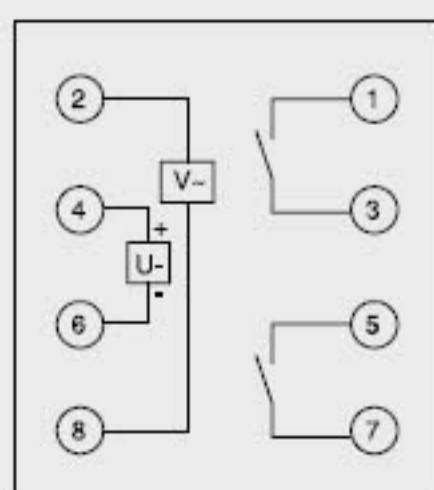
·Operating time: the operating time of over-voltage relay 1.1 times setting value  $\leq 15\text{ms}$ ; the operating time of low voltage relay 0.5 times setting value  $\leq 30\text{ms}$ ,

·Power consumption: AC loop power  $< 2\text{VA}$ ; DC loop power consumption  $< 5\text{W}$

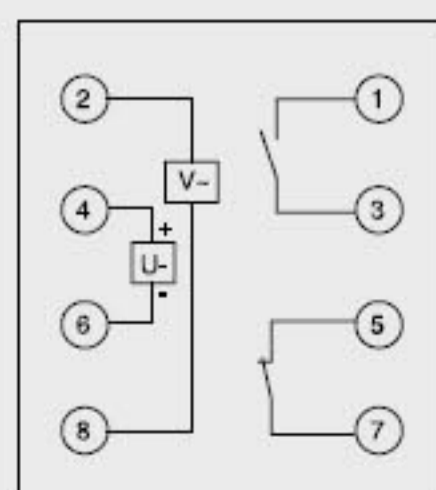
·Contact capacity: When DC inductive load circuit in which voltage  $\leq 250\text{V}$ , current  $\leq 5\text{A}$ , time coefficient =  $5 \pm 0.75\text{ms}$ , the breaking capacity of product output contact is 50W. When the output contact is under the above-specified load condition, the product can operate and return  $5 \times 10^4$  times reliably. The long-term permit making current of output contact is 5A.

·Dielectric strength: The conductive terminals of the products are connected together, and the uncharged metal or shell exposed outside can bear 2000V (valid value) 50Hz AC voltage experiment, which lasts 1 minute without insulation breakdown or flashover phenomenon.

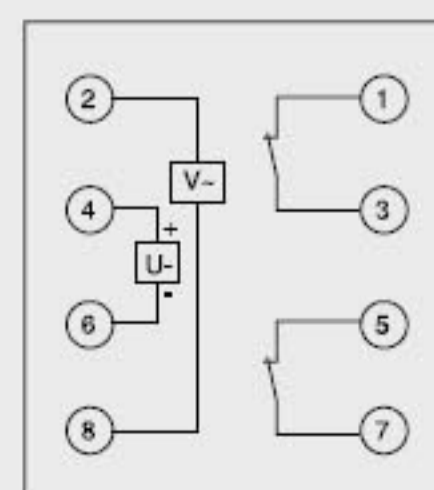
## 3 安装开孔尺寸、接线图 Mounting plate opening size, Wiring drawing



JY-40U<sup>A</sup>/1a-6a



JY-40U<sup>A</sup>/1b-6b



JY-40U<sup>A</sup>/1c-6c