



## The PT-Series: Intelligent Protectors



### General and Applications:

The KS-PT series intelligent protectors provide microprocessor data display and are equipped with functions such as real-time monitoring of voltage and current of individual phases of a three-phase network as well as safety warning. They are easy to install and operate and suitable for data monitoring and comprehensive protection or comprehensive control of a low-voltage power distribution systems and can be used to protect electric motors and other loads as well as network protection.

### Functions:

#### I. Display:

Nixie screen for real-time display of three phases: network parameters such as voltage, current and error warning as well as operating conditions.

#### II. Settings:

1. Direct adjustment of options such as current transformer ratio, over voltage protection, under voltage protection, over current protection, three-phase asymmetries protection, delay control.
2. Automatically store set parameters that will not be lost when power is lost.

#### III. Protective functions:

1. Self-test recovery function and automatic reset function;
2. Protection against over voltages, over voltages, over currents and three-phase asymmetries;
3. Phase sequence protection.

#### IV. Border crossing and error warning function:

In the event of a power failure or when a limit is exceeded by a parameter, the Nixie tubes display a warning signal to indicate over voltages, under voltages, over currents, three-phase asymmetries, phase failure, and limit value exceeding by another parameter.

### Technical Parameters:

#### 1. Basic parameters:

- Power voltage: AC380V $\pm$ 20% 50Hz $\pm$ 5%
- Sampling voltage: :AC380V~480V
- Sampling current: $\leq$ 5A
- Power consumption: $\leq$ 3W
- Sensitivity: $\geq$ 100mA

#### 2. Control parameters:

- Current change ratio: 1~1000
- Over voltage setting: 400V~480V Step length :1V
- Under-voltage setting: 300V~360V Step length :1V
- Over current setting: 1~9999A
- 3 phase unbalance ratio setting: 10%~90%
- Delay control: 1s~60s

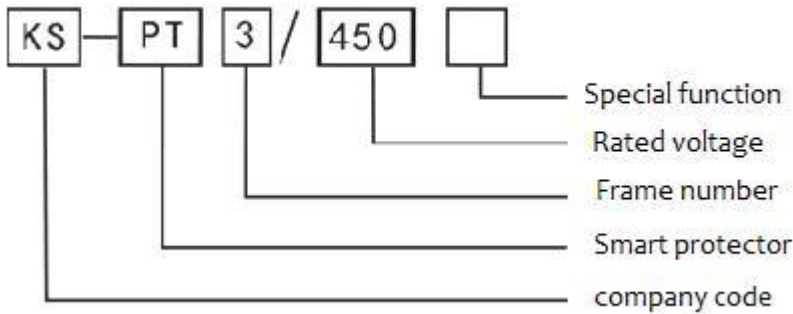
#### 3. Measurement precision:

- Voltage: $\pm$ 5%
- Current: $\pm$ 5%



Note: The specific technology parameters can be custom-made base on the customer's requirement.

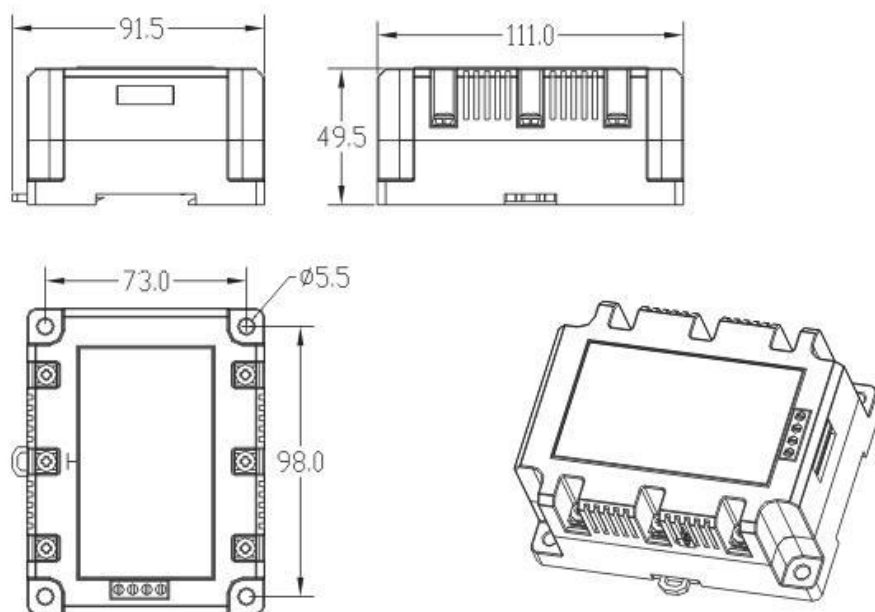
**Product code:**



**Operating conditions:**

- Elevation Altitude:  $\leq 2500\text{m}$
- environment temperature:  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$
- Relative humidity: 20%~90% [40°C]
- Atmospheric pressure: 79.5Kpa~106Kpa
- Environmental conditions: Ambient medium no explosion danger, no gas of damaging the insulation and corrosion of the metal.no conductive dust, installation is not easy to violent vibration, no snow and rain erosion.

**Installation Size (Unit:mm):**





## Wiring Diagram:

