

# AUTOMATIC PROTECTION RELAY

## Introduction

Automatic relay protection is a device used in power systems to automatically detect and respond abnormal conditions such as overcurrent, overvoltage, ground faults, etc. Alarms to protect electrical systems and equipment from potential hazards and ensure safe operation of electrical systems.

Blue Jay's power distribution safety-related products include Arc flash protection relays, Motor protection relays, WSK series, DH series switchgear temperature and humidity control equipment, etc. Products have miniature intelligence, high integration, high sensitivity and high precision, and has higher anti-electromagnetic interference performance and higher IP protection level. It is suitable for various monitoring sites to ensure electricity safety.

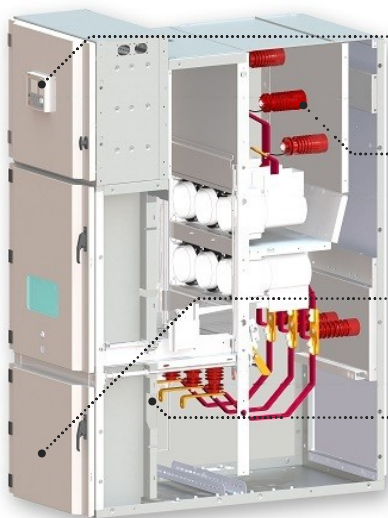


## Main Features

- Automatic control, high reliability.
- Ability to record and analyze failure events.
- Modular design, convenient and quick installation and maintenance.
- Quick response: detect and cut off the faulty circuit in time to effectively prevent accidents.
- High-precision measurement and judgment ability, accurately judge the type and location of the fault.
- Versatility: such as overload protection, short circuit protection, ground fault protection, etc.
- 24 hours real-time monitoring, RS485 remote control.

## Application

- Industrial automation system.
- Large municipal engineering project.
- UPS system, battery system.
- Real-time monitoring and alarm of power system.
- Substations, power plants, transmission lines, distribution lines.
- Protects motors from overloads, short circuits and motor failures.



### Integrated CB control panel

- CB switch status indicate
- CB switching operation
- Integrate PMD and other functions

### Thermal Monitoring (SCM-W3000)

- Surface touch or infrared sensor
- Cable terminations
- CB contact fingers
- Busbar joints

### Partial Discharge Monitoring (SCM-PD3000)

- TV and ultrasonic sensor
- PD detection
- PD localization

### Arc Flash Protective (AFR)

- High precision fiber probe
- Arc detection
- Arc localization
- Fault protection

# WSK SERIES CABINET THERMOSTAT

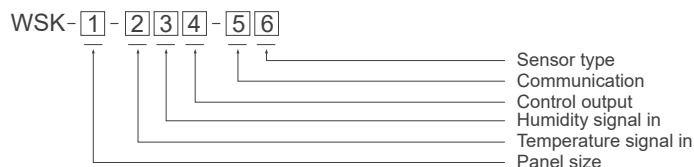
## CABINET ENVIRONMENT MONITORING

### Introduction

WSK series cabinet thermostat is a measurement device used on temperature and humidity control. the humidity control module is integrated in the system, greatly improving the suitability of the equipment, obtaining the temperature and humidity change from the sensor and sending the measured data to the electronic processor. The output device will then control the temperature variation within a specific range.

WSK series cabinet thermostat using load control relay output, has fast output response, accurate PID parameter auto-tuning, support, Modbus communication protocol and is built-in with various output types, allowing different systems to reach a stable control status very quickly, can be used in the worst environment for long-term use, applied to the various occasion which need temperature and humidity control.

### Ordering Information

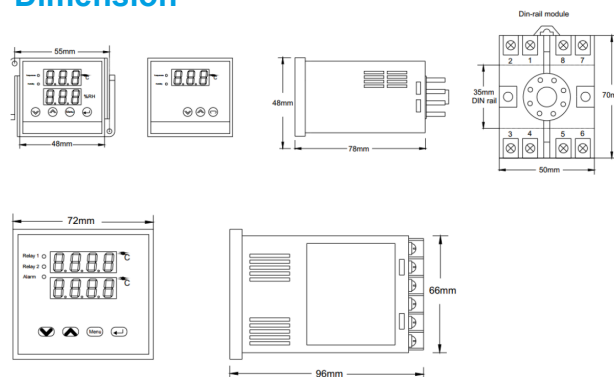


Num.	Code	Description
1	Blank	Standard 48(W) x 48(H)mm
	72	72(W) x 72(H)mm
2	W1	One channel temperature sensor input
	W2	Two channels temperature sensor input
3	S1	One channel humidity sensor input
	S2	Two channels humidity sensor input
4	K1	One channel output
	K2	Two channels output
5	Blank	Without this function
	R	One channel RS-485 communication port
6	Blank	Default select from "Related Accessories"
	T	Thermocouple (-K,-J,-T,-E,-N,-R,-S,-B,-L,-U,-YXK)
	P	Platinum RTD(-PT100,-PT1000)
	L	Linear signal (0~5V,0~10V,0~20mA,4~20mA,0~50mV)

### Main Features

- 3 digital or 4 digital LED screens.
- Built-in digital filter reduces interference.
- RS485 MODBUS RTU Communication .
- Standard panel size 48x48mm / 72x72mm.
- Optional 35mm DIN rail (only 48x48mm mode).
- Heat/Fan control mode free to the configuration.
- Sensor length max 10 meters (default 3 meters).
- Accuracy temperature within 1°C & humidity within 5%.
- Support multi sensor input (K, S, T, E, J, B, N, CU50, PT100).

### Dimension



### Related Accessories



#### Model: WK04-D

- 4-pin din-rail temp. and humid. integrated type
- Temperature: -50~80°C, accuracy ±1%
- Humidity: 0~99%RH, accuracy ±5%RH



#### Model: WK05-D

- 3-pin din-rail temp. and humid. integrated type
- Temperature: -40~70°C, accuracy ±1%
- Humidity: 20~95%RH, accuracy ±5%RH



#### Model: jly01

- High-accuracy temp. and humid.sensor
- Temperature range: -40~120°C, accuracy ±0.3%
- Humidity range : 0~100%, accuracy ±3%RH

## Technical Characteristics

Basic parameters	
Power supply	85V~265VAC/DC 50Hz, optional 24/48VDC
Power consumption	≤ 5VA
Dimension (W*H)	48*48mm / 72*72mm
Input	
Temperature	-40~99°C
Temp.sensor accuracy	+/-0.2 °C
Humidity	1~98%RH
Hum.sensor accuracy	+/-3.0%RH
Cable length	2 m.(3m option)
Sampling rate	400 msec/per scan
Output	
Relay output	2-channels, 250VAC, 5A 1PH, resistive load
RS485 communication	MODBUS RTU, 4800/9600 baud rates
Display	
Waterproof degree	IP40
Display	2-line x 3 character 7-segment LED display
Keypads	Menu, Enter, Increase, Decrease
Environment	
Protection	Anti-containing acid, alkali, salt gas
Storage temperature	-10~55°C
Storage humidity	20 ~ 93%RH, Non-condensing