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.

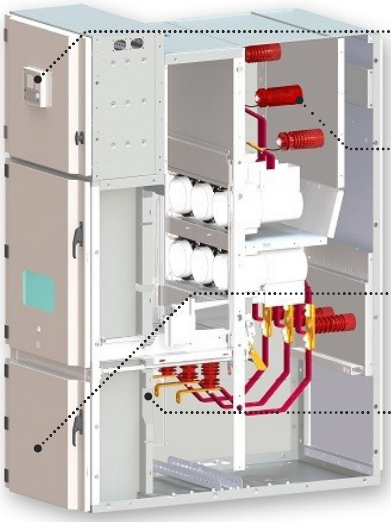
Blue Jay's power distribution safety-related products include Arc flash protection relays, Motor protection relays, WSK series , DH series switchgear temperature and humidity control equipment, etc. Products have miniature intelligence, high integration, high sensitivity and high precision, and has higher 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

DH SERIES PELTIER COOLER DEHUMIDIFIER

Introduction

The DH series peltier condenser adopts semiconductor refrigeration and dehumidification method, sucks humid air through the fan, condenses into water through the semiconductor refrigeration mechanism, and then discharges it from the cabinet through the conduit to achieve a good dehumidification effect. This reduces relative and absolute humidity with little increase in temperature, radically preventing accidents and device aging.

Ultra-small installation size, high efficiency and energy saving, no need for heater and fan wiring. Equipped with a data acquisition module for remote monitoring, a reliable replacement for thermostats and heater/fan combinations.

Working Principle

Moist air sucked in by fan

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Condensate cooled by peltier cooler

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Condensed water drips into conduit

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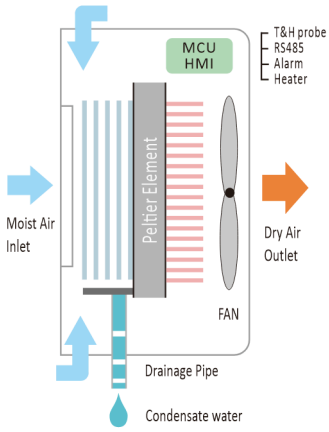
Drains out of conduit



Main Features

- Small size, light weight, easy installation.
- Dehumidification ducts actively induce condensation, discharged gas dehumidified by heating.
- Automatic/manual dehumidification function optional, temperature and dehumidification start value adjustable.
- Humidity and temperature sensor 24-hour real-time sampling, beyond the set start value automatically induced condensation.
- Optional RS485 port, support remote control/adjustment of operating parameters and fault reporting function.
- Do not need extra sensor and probe, optional passive output node for external heater.
- Adopt special moisture-proof components to ensure normal operation in humid environments.

Application

- GIS control cabinets.
- HV/LV control switchgear.
- Ring network cabinets.
- Mechanical control cabinets.
- Box-type substations.
- Dry-type substations.

Ordering Information

Model	Max power	Air volume flow	Sensor	Material	Optional functions
DH1-20	20W	30m³/h	Built-in	ABS	-RS485 Communication -Heater (100-300V) -Alarm (Sensor disconnection alarm,Power loss alarm,Temperature and humidity over limit alarm)
DH2-60	60W	70m³/h	External	ABS	
DH3-60	60W	70m³/h	Built-in	ABS	
DH4-60	60W	70m³/h	External	Sheet metal With anti-rust spray	
DH5-80	80W	100m³/h	External	Aluminum alloy	
DH6-200	200W	140m³/h	External	Sheet metal With anti-rust spray	

Notes:

1. Only Model DH3-60 and DH6-200 can choose all three additional functions, other models can only choose two of three.
2. If the device has a built-in sensor, you cannot select sensor disconnection alarm.
3. Alarm node: default dry node, equipment failure: default normally open.

Technical Characteristics

Model	DH1-20	DH2-60	DH3-60	DH4-60	DH5-80	DH6-200
Working power						
Power supply	85V~265VAC/DC 50Hz					
Peltier rated power(1)	20W	60W	60W	60W	80W	200W
Air volume flow	30m³/h	70m³/h	70m³/h	70m³/h	100m³/h	140m³/h
Dehumidifying capacity	100ml/Day	250ml/Day	250ml/Day	300ml/Day	350ml/Day	600ml/Day
	@35°C,90%RH	@35°C,90%RH	@35°C,90%RH	@35°C,90%RH	@35°C,90%RH	@35°C,90%RH
Measurement and ability						
Humidity monitor range	20%RH~98%RH					
Sensor accuracy	±5%RH					
Dehumidify start threshold	45%RH~98%RH, Default 65%RH					
Environment temperature	5~60°C					
Temperature monitor range	-40~80°C					
Sensor accuracy	±1.0°C					
Heater start threshold	1~55°C, Default 5°C					
Heater power	50~500W optional					
Other						
Physical dimension	75*90*53mm	102*171*73mm	102*140*62mm	132*245*67mm	138*150*70mm	242*247*67mm
Screen	1 digital LED	2 digital LED	2 digital LED	2*3 digital LED	1 digital LED	2*3 digital LED
Standards	IEC60255-22-1					
Communication	RS485, modbus-RTU (Optional)					

Notes:

1. The choice of the rated power is related to the cabinet's inner volume and airtightness, and the general reference value is:

   0.5cubic meter cabinet choose 15w,1.0cubic meter cabinet choose 30w,
   1.5cubic meter cabinet choose 40w,2.0cubic meter cabinet choose 60w,
   Cabinet volume is calculated according to the inner diameter, Length*Width*Height.

2. Sensor accuracy of 5% is tested with the inside probe, product optional external cable type sensor. Please contact the sales team before ordering.

3. Device provides passive NO contact for external heater connection, capacity is AC 250V5A. Users can free to order heaters or purchase with the DH series.