PSW300

PSW300 series of intelligent power distribution terminal (DTU)

Summary

PSW300 series intelligent power distribution terminal (DTU) is the latest development of the company's new generation watchdog controller according to integrated domestic and foreign advanced technology, the actual demand of the power distribution area. The equipment is installed on the responsibility boundary point of 10kV overhead distribution line, which can achieve to automatically remove single phase to earth fault and isolate phase short circuit fault.

The controller and the switch body through the control cable and the aviation connector are electrically connected to achieve the protection and automatic monitoring function. The product is used in 10kV overhead distribution line, which can greatly reduce the failure of the fault line of the accident power, narrow the scope of the fault, shorten the time of the user, so as to improve the reliability of the power supply.

Product features

- Modular design: CPU board, power board, AC sampling model, open the board and other functional modules, can be flexibly configured according to the specific situation;
- Multi CPU architecture: the use of a number of 32 bit low power embedded CPU architecture, can simultaneously control the multi-channel switch, the CPU independent operation, stable and reliable;
- The use of electric power automation system embedded software platform design, flexible expansion of application;
- Device using zero sequence power direction criterion, can accurately judge the single-phase grounding fault inside and outside the world.
- The device can be applied to the ground system of neutral point, small resistance grounding and arc suppression coil grounding system. Device can be connected with a resistor divider voltage sensor or voltage transformer, and internal circuit of which is insulated voltage signal. The device, using standard 3U aluminum alloy chassis easy to install, has excellent ability to resist electromagnetic interference;
- With battery management function. To prevent battery over charge, over discharge, improve battery life.
- Controller with data communication function can be achieved the background of data exchange through the GPRS data communication module.

Main functions

- Measurement: three-phase voltage, current, zero sequence voltage, current, 16-48 remote signaling, 26 remote

signaling.

- Protection function: single phase earth(with zero sequence direction) protection,interphase short circuit protection ,over current protection, over and under voltage protection,acceleration reclosure brake.
- Automation functions: reclosing, incident record, communication.

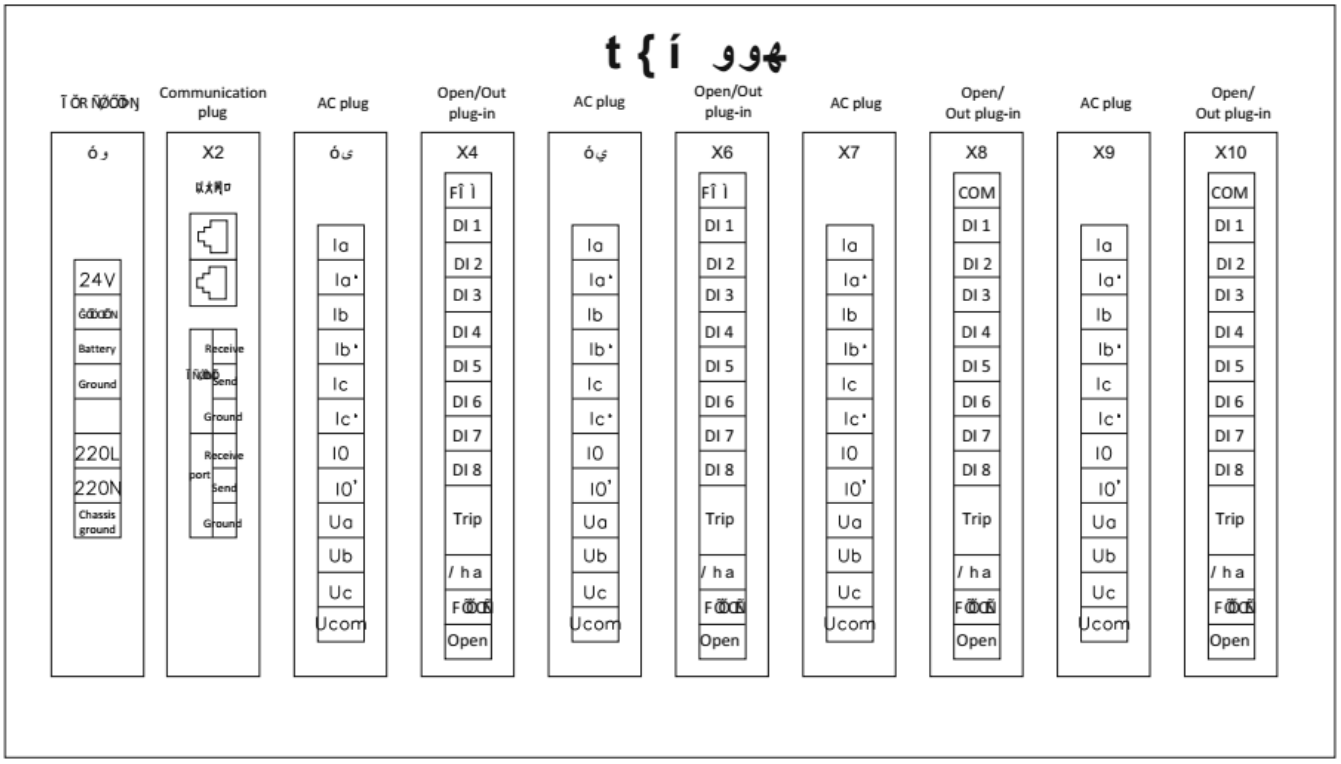
Boundary switch fault action principle

Fault type	System mode	Switch type			
		Circuit breaker		Load switch	
Single phase earth fault	The neutral point not grounded or grounded in the arc suppression coil	In of bounds	Out of bounds	In of bounds	Out of bounds
		Automatic tripping	No action	Automatic tripping	No action
	Small resistance grounding system	Prior to substation protection	No action	Prior to substation protection	No action
Phase short-circuit fault		Automatic tripping	No action	Cooperate with superior protection, delay action	No action

Technical data

Rated current	1A or 5A；
Rated voltage	PT input 100V or sensor input；
Protection error	The error of current setting value is no more than ±3% (or 0.02In), and the error is not more than ±3%.
Return coefficient	Lower than 0.95
Switching pulse width tuning range	0.1s~9.9s，Integer differential 0.01s， Factory set to 0.1s.
Tripping export contact capacity	AC250V/5A.
Working power source	AC85V-265V，Power consumption≯5W。
Normal operating temperature range	-25~+60℃
Storage and transportation temperature	-55~+85℃
Relative humidity	≯95%
Device size	4- way switch 360.5*128.7*190 (length * width * depth)

Terminal definition



Dimension chart

To control the 4 way switch as an example, the maximum can be extended to control the 6 switches