

BF2-2D FTU

Product profile

This FTU is a new type of high voltage switch control device which combines DSP high speed sampling operation chip and high performance ARM chip. It can quickly and stably complete the monitoring of switch body. It integrates the functions of protection, measurement, control, monitoring, communication and tele-control. It has the characteristics of high integration, flexible configuration and friendly interface. The invention is widely applied to radiation type power supply and ring network power supply system, can help the system identify the transient fault and permanent fault of the circuit, can automatically eliminate the influence of the transient fault on the line, can isolate the permanent fault section, avoid the large-area power outage for a long time, and automatically restore the power supply of the non-fault section grid, so that the distribution network automation can be realized economically and practically.

Main technical parameters

Work environment

Ambient temperature: $-40 \sim 85^{\circ}\text{C}$

Relative humidity: $10\% \sim 100\%$

Height above sea level: ≤ 2000 米

Atmospheric pressure: $70 \sim 106\text{KPa}$

Operating environment: Outdoor, free of flammable, explosive, chemical corrosion and violent vibration

Remote measurement

DC sampling accuracy: Class 0.5

Ac current sampling accuracy: Class 0.5

Ac voltage sampling accuracy: Class 0.5

Power sampling accuracy: Class 1

Remote signalling open in

Signal input mode: passive contact

Remote signalling open in resolution ratio: $\leq 2\text{ms}$

Software anti-shake time: 10-1000ms settable

Electromagnetic compatibility

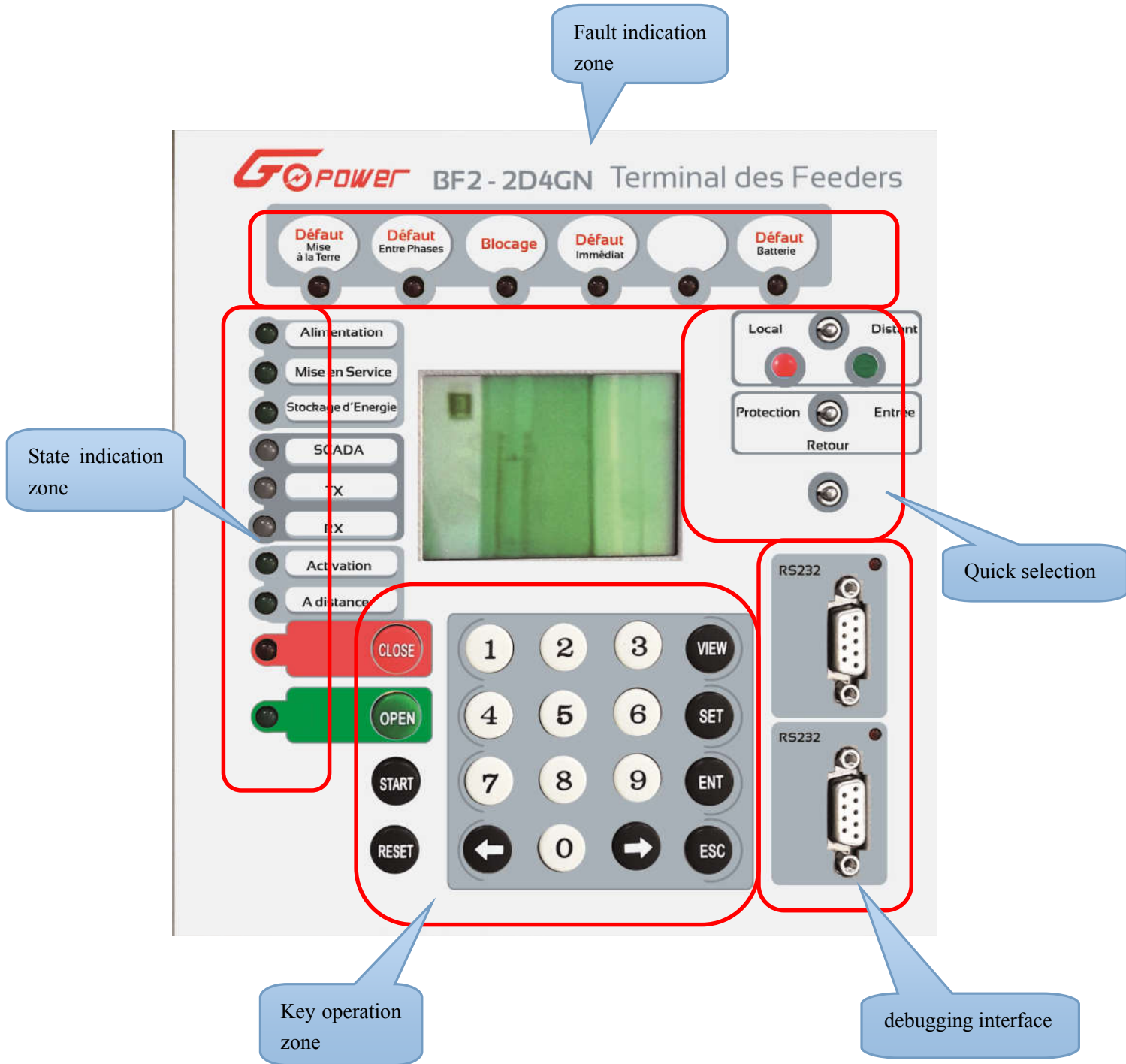
Meet fast transient interference test

Meet high frequency interference test

Meet surge test

Meet static discharge interference test, etc.

Visual human-maching interface



Key functions:

S/N	Functions	Remarks
1.	Three section protection	Each protection can be vote back independently
2.	Over-current count protection	Failure time count, output after meeting the number of times, output mode is optional
3.	Zero-sequence protection	Output options: exit, alarm and tripping
4.	Pre - voltage fault protection	Protection can be accelerated when combined at fault point
5.	Post-reclosing acceleration	Vote back independently
6.	Constant time-lag	The protection time is fixed
7.	Inverse time limit	Multiple protection curves optional
8.	Ring network protection	Hardware needs to configure double PT
9.	Event Log	The recording time is exactly millisecond
10.	Status enquiry	The main content is remote control and remote metering
11.	Remote programmable	Remote input support programmable
12.		

Communication protocols

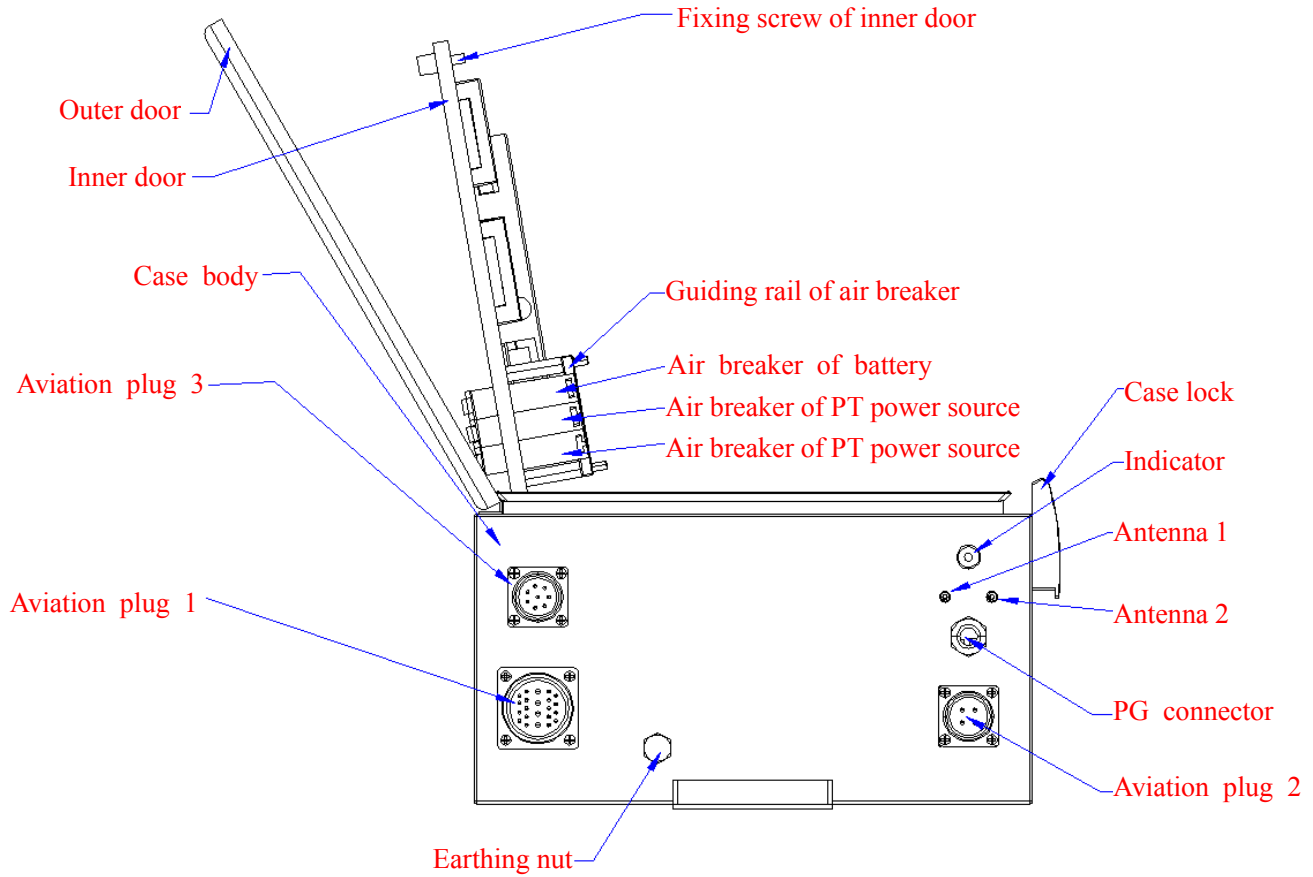
S/N	Protocols	Remarks
1.	IEC60870-5-101 balanced	
2.	IEC60870-5-101 unbalanced	
3.	IEC60870-5-104	
4.	DNP3.0	Now support level 3
5.	Modbus	
6.		
7.		

Communication interface

S/N	Interface	Remarks
1.	RS232	Standard configuration
2.	RS485	Selective configuration
3.	Ethernet	Selective configuration
4.	Optical fiber	Selective configuration
5.	Interface	
6.		

Product drawing

The case of this device is stainless steel with sprayed powder. It is beautiful and has sufficient rigidity and excellent anti-rust performance. The following picture is the overall structure and layout of the device.



Overall Structure and Layout of the Device

Note: This picture is only describing the location and layout. Part of the components are optional.