

# Smart AFCI Mobile phone BLE App User's Manual



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#### 1.Brief Introduction

Smart AFCI Mobile phone app is my company (HeRui electronic) exploited a AFCI real-time monitor system. It used blue tooth (BLE 4.0) for AFCI protection parameter setup and electric parameter display.

## Features

- Display last fault massage (ARC,LK,OV,UV)
- Display real-time voltage (precision about 2%)
- Display real\_time Current (precision about 5%)
- Display power meter (precision about 10%)
- Display real-time leakage current (precision 3%)
- Display real-time power index
- Display real-time temperature (Internal temperature of the afci)
- Switch the protection mode and monitor mode
- Setup protection item (arc,lk,uv,ov)
- Setup leakage current threshold (10-60mA)

Eight circuit breaker can be monitored at the same time

## 2. Operating Mode

A) Green light normally on state (Monitoring mode)

Operation interface and basic parameters as shown in figure one



FIG.1

#### Attention

Numerical key: Set the leakage current value

CLRF: Clear the fault, then the indicator light shows normal (green light normally on, red lights go out)

F1: Learn and record arc fault that may be similar to the real arc fault ,while it can only learn four waveform

EM: Remove Learning Qty's numerical value

DATA: Real-time upload data

Mode: Switches A and mode (A is equal to the protected mode,B is equal to monitor mode )

CUT: Cut off the power supply

TEST:Test key for special function keys

## **Detailed Introduction**

- (1) Number of devices: circuit breaker connection number, in the figure ten and eleven for three circuit breakers are connected.
- (2) Real-time Display of the Parameters: Voltage, Current, Power factor, Temperature and power consumption.
- (3) Leakage Current:leakage current threshold setting range is 10 to 60 mA, the application of the default value is 25 mA, again when the power is on electricity for the default value is 25 mA.
- (4) Fault Display: Displaying the equipment whether there was a fault last time.
- (5) Learning Qty:Learn by F1 key can record arc waveform similar to that of the real electric arc fault, but the record can be at most four kinds of waveform, lest cause misoperation.
- (6) Red and yellow lights flashing three times each pause again marks a state of under voltage .Red and yellow lights flashing six times each pause again marks a state of over voltage.
- (7) the red light flash for arc fault, yellow lights flash for leakage fault.
- (8) when load current is greater than 2 A ,the green light to shine.

B) Green light shining state (Protected mode)

Operation interface and basic parameters as shown in figure two



FIG.2

## **Detailed Introduction**

- ① ARC or LK or OV or UV, It has two states of bright and out ,it has memory function, it can be set for the protection and unprotection function. when after switch state ten seconds ,red and yellow lamp light at the same time marks that memory is successful .
- 2 After power on the red light flash eight times: arc fault
- (3) After power on yellow light flash eight times: leakage fault
- 4 After power on red and yellow light flash three times, for under-voltage fault
- (5) After power on red and yellow light flash six times, for over-voltage fault
- 6 Phone interface can display the relevant fault information, press the clear key, the fault information will be cleared.