Manual

Selective power limit protector

JGXZ-63

Wenzhou Jiangguang Electric Technology Co., Ltd

1、Introduction

JGXZ-63 is a selective power limit protector, mainly used to limit the power consumption of individual electrical appliances with excessive power, and an intelligent power limit protector for exceeding the total power limit. At the same time, the product has multiple protection functions such as overvoltage, undervoltage, short circuit, leakage, temperature, frequency, and electricity measurement. The product has the advantages of modularity, intelligence, visualization, and supports the standard Modbus 485 communication protocol. All protection parameters such as overvoltage, undervoltage, power limit, leakage protection, etc. can be set according to the power demand to ensure that the protector can instantly cut off the power supply in case of overvoltage, undervoltage, short circuit, leakage and other faults in the line, protecting the electrical equipment from damage.

This series of products has a compact structure, beautiful appearance, and standard guide rail installation. It is mainly suitable for school dormitories, rental houses, and other occasions.

2、Product working principle

Example: Product default parameters: Single power is 0.2kw, limited to 3 times, total power is 2.0kw

a、 Connect 10 appliances with a power of less than 0.2kw separately, and at this time, the individual power does not exceed 0.2kw, and the total power does not exceed 2.0kw. The protector is working normally. If the single power of the connected electrical appliances does not exceed, but the total power exceeds 2.0kw due to too many connections, the protector will disconnect within the specified time, and manual reset is required at this time.

b、When a single electrical appliance is connected with a power greater than 0.2kw, the red light P of the product flashes, indicating that an appliance with excessive power has been connected. If the load power supply is not disconnected and cut off in a timely manner within the specified time, the product will enter a countdown. When the countdown ends, the product will automatically close. If there are still over limit appliances after closing, the product will automatically disconnect. After exceeding the limit for more than 3 times, the reset button must be manually pressed to close the circuit.

c、 If the power of a single appliance does not exceed the limit, but exceeds the total power, the product must be manually reset to close after protection.

When manually pressing the reset button is required, all over limit electrical appliances need to be removed

3、Working conditions and parameters

3.1. The first normal power on will automatically close after a 1-second delay; The product will automatically disconnect within 1 second in the event of overvoltage, undervoltage, overcurrent, or leakage during the first power on;

3.2. Current protection parameters:

a. ≥ 1.0 times current, set range 1-120 seconds, default 10 seconds

b. ≥ 1.2 times the short-circuit current, 0.1 seconds to open the circuit

3.3. The ambient temperature should not exceed+40 ℃, not be lower than -5 ℃, and the average temperature over 24 hours should not exceed+35 ℃; At+40 ℃, the surrounding air humidity should not exceed 50%.

3.4. The sea level of the installation location shall not exceed 2000 meters.5. Pollution level III.6. There are no explosive hazardous media, no corrosive or insulating gases, and no conductive dust in the installation environment. There are also no areas affected by rain or snow.

4、Product settings

4.1. Settings button: Press and hold the settings button for 2 seconds to enter the settings mode. After entering the settings mode, press it once to enter the next settings menu;

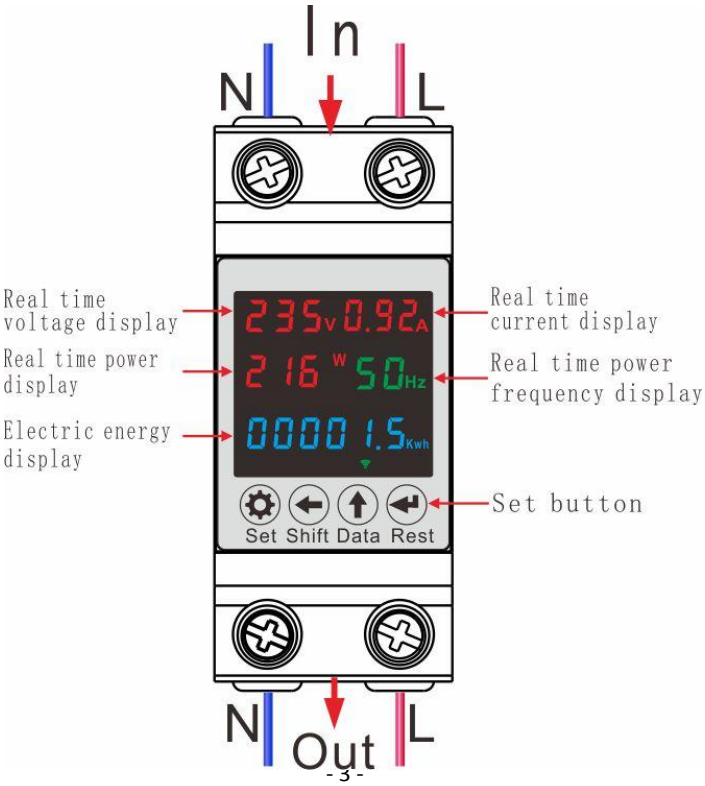
4.2. Shift key: In the setting state, it is the digital shift function;

4.3. Data key: query the last fault information of the product, and change the parameters that need to be set when setting the status;

4.4. Reset button: When the first overcurrent or leakage occurs, the product will automatically close after a specified reset time delay. When the second overcurrent or leakage occurs, it must be manually confirmed that there is no fault in the circuit. After manually pressing the reset button, the product will close. When in the set state, press the reset button for 1 second to save and exit the set state,

Press and hold the reset button during real-time display to open the product, and press it again to close it.

5、Panel description



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6、Real time display, fault information, and functional menu

Real time display

Total power exceeds the limit

Number of times a single electrical appliance exceeds its power limit

Overvoltage protection

Undervoltage protection

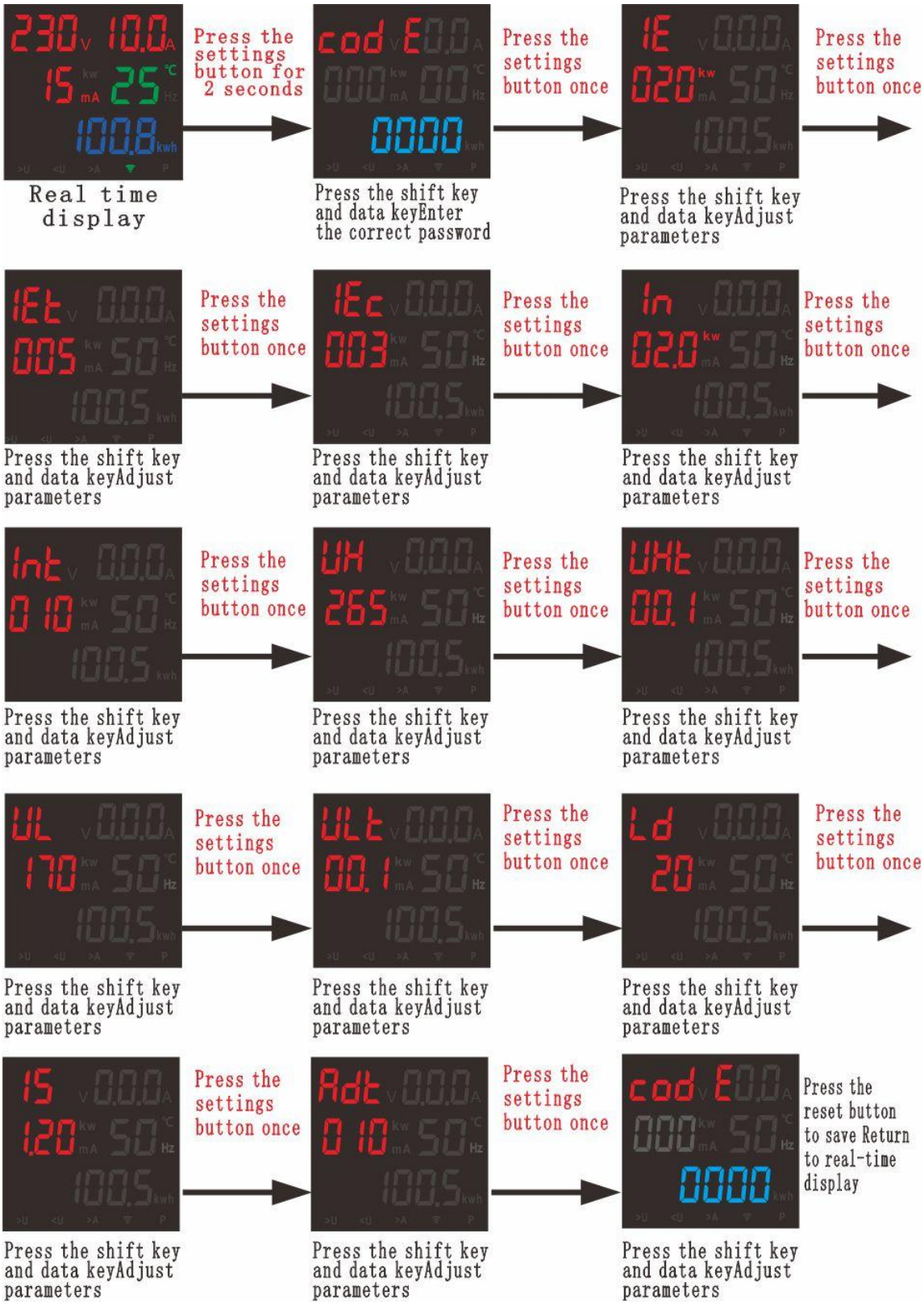
Leakage current protection

Short circuit protection

Menu	Symbol	Default value	Setting Range
Range of total power limit setting for electrical appliances	IE	0.20kw	0.01kw~9.9kw
Single appliance power limit disconnect time	IEt	5S	1~120Second
Single appliance power limit frequency setting	IEc	3	1~10 number of times
Range of total power limit setting for electrical appliances	In	2.0kw	0.5kw~13.5kw
Total power over limit action time	Int	5S	1~120Second
Overvoltage protection value	UH	265V	220~300V
Overvoltage action time	UHt	0.1S	0.1~10Second
Under voltage protection value	UL	170V	140~200V
Undervoltage action time	ULt	0.1S	0.1~10Second
Leakage protection value	Ld	20mA	5~300mA
Short circuit multiplier setting	IS	1.2	1.1~6 Multiple
Recovery time after malfunction	Rdt	10S	1~120Second
Password	CodE	0000	0000~9999

When setting a single power value, it must not exceed the total power value. If a single power exceeds the limit, there will be no protection, only total power protection.

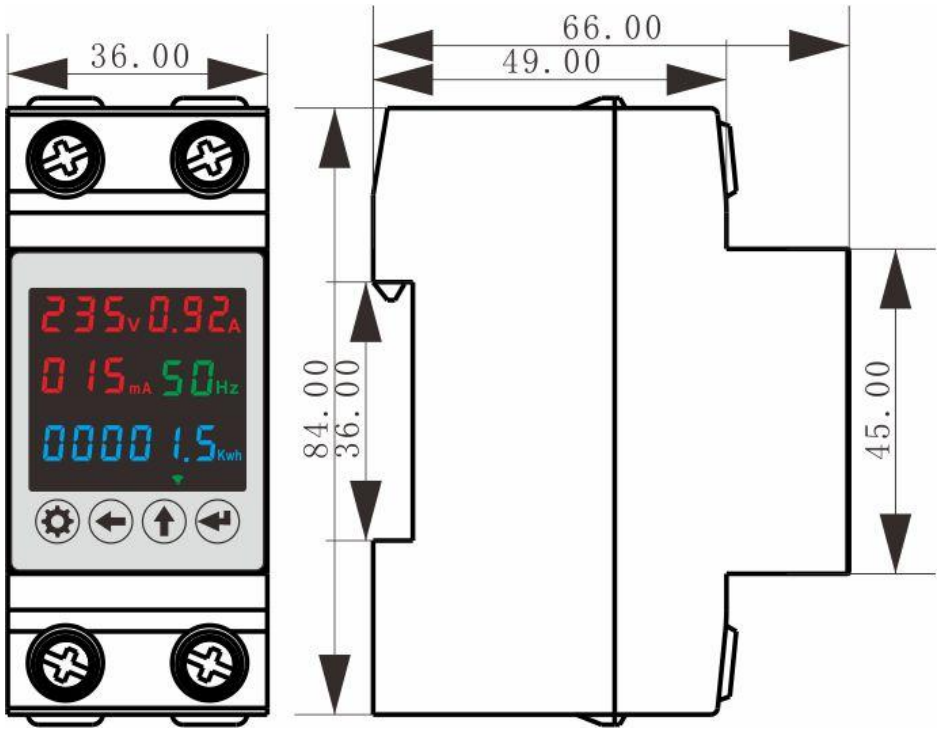
7、Product Settings



8、Technical Parameter

8.1. Voltage detection range: AC80~450V, accuracy level: 0.2.
8.2. Current detection range: 0.1~63A, accuracy level: 0.2 level.
8.3. Leakage current detection range: 5-300mA, accuracy level: 1.0 level.
8.4. Temperature detection range: -50~160 ℃, accuracy level: 1.0 level.
8.5. Electricity metering accuracy: Level 0.5
8.6. Product's own power consumption: ≤ 1W.
8.7. Withstand short-circuit current: 2000A.
8.8. Mechanical lifespan ≥ 100000 cycles, electrical lifespan 2000 cycles.
8.9. Product wiring method: lower incoming line leads out, upper incoming line leads out. The default wiring method is upper wire and lower wire.
8.10. Wiring capacity of 25 square meters

9、Dimensions



10、matters needing attention

9.1 When the protector is energized for the first time, it needs to delay 1 second to supply power to the load normally, and it will be closed 20 seconds after the fault occurs and the power supply is normal;
9.2 The N line of the protector is the zero line, and the L is the live line, and must not be wrongly connected;
9.3 Please tighten the clamp screw before use to prevent damage to the product due to poor contact;
9.4 If you do not use the product for a long time, you should pay attention to moisture-proof, dust-proof and other protective measures;

9.5 This product has no isolation protection function. Please disconnect the front-level circuit breaker switch before line maintenance.

11、Ordering Notice

Please specify the product model, specifications, and quantity. If there are special requirements, please indicate them separately.

Example: JGXZ-63/0.2kw,2.0kw,120 Pieces, 1 box of 120 pieces.