ELECAL

AG13 Intelligent Self-resettable Overvoltage and Undervoltage Protection Device

1. Product Introduction

Intelligent Self-resettable Overvoltage and Undervoltage Protection Device is a new generation power protection device, which is developed by our company based on the current status of electricity. Its control circuit adopts highly reliable MCU chip and its execution unit uses advanced magnetic relays. The self-resettable overvoltage and undervoltage protection device is produced by modularization standard, so it shows low power consumption, excellent performance and high reliability to ensure work normally under abnormal voltage conditions.



AG13-100/4P

2. Product Features

AG13 Series Intelligent Self-resettable Overvoltage and Undervoltage Protection Device shows features as following:

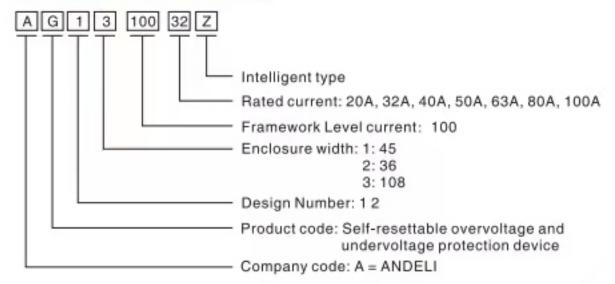
- -Product shape is compatible with the miniature circuit breakers;
- -Small size, large switching power, max. current is 100A;
- -Embedded high-performance MCU specialty chip to ensure accurate and precise measurement of voltage.
- -Saving power because its circuit breaker switch is made by Instantaneous pulse- driving coil;
- -Large magnetic latching strength; Vibration resistance; Small contact resistance, low power consumption and reliable performance;
- The protection device will break the circuit when single-phase line is under overvoltage or undervoltage; Without manual operation, the protection device will automatically reset to connect the circuit after single-phase voltage returns to the normal delay value. The protection device will not malfunction when the circuit is under instant or temporary overvoltage.
- The protection device will not be damaged itself if the fault voltage of the circuit reaches the highest value.

Voltage protection range: 0~600V (Each phase)

- Withstand impulse voltage: 4kv (Compliance with electrical safety standards III class)
- The LED with double color on the panel indicate the working status of the protection device.
 When the indicator light is green, the power is supplied normally. When the indicator light is red,
 the power is cutted off.
- Modular design of product appearance following the 6P Standard Modules; Din-rail mounting
 for installation.

Connection capacity: insulated wire of 35 mm² and below.

3. Model Number and Meaning





AG13 Intelligent Self-resettable Overvoltage and Undervoltage Protection Device

4. Application

AG13 Series Self-resettable Overvoltage and Undervoltage Protection Device is suitable for three-phase AC 380V, frequency 50Hz and rated working current 100A and below. When single-phase voltage is abnormal in the grid due to disconnection of neutral line, wrong connection of phase line and neutral line, serious imbalance in three-phase load, large wire resistance, phase dislocation or higher harmonics and other reasons, the protection device will automatically disconnect the power, prevent damage to electrical equipment and thus protect electrical equipment.

The protection device is mainly designed to protect the distribution line for single-phase electrical equipment inside household distribution box. The protection device can be applied in energy consumption monitoring of large public building, enterprise energy management, conservation-oriented campus, engine room and substations, street lighting control, mobile communication base stations and intelligent home and other various fields, The protection device can be used in overvoltage and undervoltage protection, power status display and energy management control unit.

5. Main Technical Parameters

Operating voltage: AC380V

Frequency: 50Hz

Product specification: 32A, 40A, 50A, 63A, 80A, 100A (Anti-resistance)

Overvoltage action cut-off value: AC270±5V

Overvoltage reset value: AC255±5V

Undervoltage action cut-off value: AC170±5V

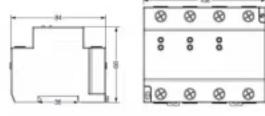
Undervoltage reset value: AC175±5V

Electricity transmitting delay after power cut-off: ≤ 40s

Action delay time: ≤ 1s

Self power consumption: ≤ 2W Mechanical life: ≥100 000 times

Outline Dimension: (KMG13-100) 84×108×66 mm (L×W×H)



6. Production Specification

Parameters Model Number	Operating voltage	Frequency	Voltage Protection Range	Electricity Transmitting Delay after Power Cut-off	Rated Input Current	Response Speed	Error
AG13-100/32Z	380V	50Hz±1Hz	165-275V	40s	32A	<10ms	±1%
AG13-100/40Z					40A		
AG13-100/50Z					50A		
AG13-100/63Z					63A		
AG13-100/80Z					80A		
AG13-100/100Z					100A		

7. Ordering Note

Please specify when ordering:

Name, Model Number, Max. Current, Quantity

Special voltage and frequency can be customized by negotiation