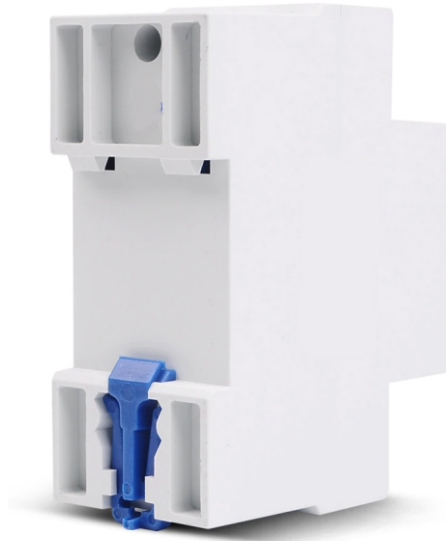


**EURO**

# Modular Adjustable Voltage Protector

# EVP-63A



## Features

- Comprehensive smart voltage protector
- Over voltage protection
- Under voltage protection
- Adjustable over voltage value
- Adjustable under voltage value
- Adjustable over voltage recovery value
- Adjustable under voltage recovery value
- Adjustable recovery time
- Adjustable actuation time
- Adjustable power on time
- Real time smart volt meter
- Nixie tube display
- Led status indicator
- Fault memory , inquiry & reset option
- Standard housing flame proof mounting in line with Din 43880 -2te ( 2 pole din size)
- Mounting method: wall mounting, din rail

## Product types

Model numbers	Description	Operating voltage	Pole
EVP63A	Modular Over & Under Voltage Protector with Real Time Volt Display	220-240VAC	2 Pole

## Technical Data

Model number	EVP-63A
Type	Standard DIN Rail mounting type
Primary Function	Smart Adjustable Over Voltage & Under Voltage Protector with Automatic Recovery
Operating voltage	AC 220V 50/60HZ 85%~110%
Frequency	50-60Hz
Rated Current	63Amps
Over Voltage Protection	Instantaneous Protection
Default Protection Value	280V
Adjustable Protection Range	221V to 300V
Under Voltage Protection	Instantaneous Protection
Default Protection Value	160V
Adjustable Protection Range	219V to 150V
Recovery Delay Time	Yes
Default Recovery Delay Time	60 Seconds
Adjustable Recovery Delay Time	2 to 512 Seconds
Power ON Delay Time	Yes
Default Power ON Delay Time	2 Seconds
Adjustable Power ON Delay Time	2 to 255 Seconds
Overcurrent Protection	No
Default Over Current Value	-
Adjustable Over Current Value	-
Leakage Protection	No
Default Leakage Protection Value	-
Adjustable Leakage Protection Value	-
Leakage Actuation Time	-
Resistance (Malignant Load) Protective Current	No
Default Resistance Protection Value	-
Adjustable Resistance Protection Value	-
Electric Energy Consumption Reading (Kwh)	-
Real Time Voltage Display	Yes
Real Time Amps Display	-
Power Consumption	Less than 2 Watts
Electrical and Mechanical Lifespan	Greater Than 4000 times
Physical Dimesions	86mm x 36mm x 66mm

## PURPOSE

Smart over-/under-voltage protector is a comprehensive smart protector that integrates functions such as over-voltage protection, under-voltage protection, voltage measurement, voltage display. In the event of over-voltage or under-voltage faults, the protector can cut off the power supply instantaneously and protect the electrical equipment from being burned out. When all lines return to normal state, the protector can automatically restore power. The over-voltage value, over-voltage recovery value, under-voltage value, under-voltage recovery value, actuation time, recovery time and power-on time of the product, functions like fault memory and inquiry and reset can be set as required. The real-time voltage value. It is so flexible that it can be used as a voltmeter.

## SETTING THE PARAMETER AND STATUS INDICATIONS

- Under normal conditions, press and hold "setting" for 3 seconds to enter the "setting" state. The Nixie tube displays "280". "280" means that the first parameter set is the over-voltage value, "280" means the default over-voltage value is 280V, press "▲" or "▼" to modify the over-voltage value. When the over-voltage value is adjusted to 300V, press the button "▲". The display shows OFF, indicating that the over-voltage protection function is off. The modification range is 221V - 300V - OFF; Press the button "setting" again to set the over-voltage recovery value. The Nixie tube displays "250". "250" indicates that the second parameter set is the over-voltage recovery value, and "250" indicates the default over-voltage. The recovery value is 250V. Press "▲" or "▼" key to modify the over-voltage recovery value. When the over-voltage protection setting is off, the over-voltage recovery value will be automatically turned to OFF. The over-voltage recovery value is modified from 220V - 299V - OFF. Press the button "setting" again and set the over-voltage protection actuation time. The Nixie tube displays "0.1". "0.1" means that the third parameter set is the over-voltage actuation time, "0.1" means the default over-voltage actuation time is 0.1 second, press "▲" or "▼" key to modify the over-voltage actuation time value, the modification ranges from 0.1 to 10 seconds; The default value is 0.1 second, and it is recommended to be  $\cong$  0.1 second.
- Press the button "setting" again, the Nixie tube displays "160". "160" indicates that the fourth parameter set is the under-voltage value, and "160" indicates that the default under-voltage action value is 160V. Press "▲" or "▼" to modify the under-voltage action value, and the modification range is OFF-150V-219V; Press the button "setting" again to set the under-voltage recovery value. The Nixie tube displays "180". "180" indicates that the fifth parameter is the under-voltage recovery value, and "180" indicates the default under-voltage. The recovery value is 180V. Press "▲" or "▼" key to modify the under-voltage recovery value. When the under-voltage protection value is adjusted to 150V, press "▼" to display OFF, indicating that the under-voltage protection is off, and the under-voltage recovery value is modified. OFF-151V-220V, press the button "setting" again to set the under-voltage protection actuation time, the Nixie tube shows "0.1". "0.1" means that the sixth parameter set is the under-voltage actuation time, "0.1" means the default under-voltage actuation time is 0.1 second, press "▲" or "▼" key to modify the under-voltage actuation time value, the modification ranges from 0.1 to 10 seconds; The default value is 0.1 seconds, and it is recommended to be  $\cong$  0.3 seconds.  
**Note: After the under-voltage actuation time is set longer than 0.3 seconds, the relay cannot be driven due to the power fault of the MCU. Therefore, when the setting time is longer than 0.3 seconds, the grid cannot be disconnected when the power is cut off.**
- Press "setting" again to set the delay time for fault recovery. The Nixie tube displays "60". "60" indicates that the seventh parameter set is the fault recovery time value, and "60" indicates that the default time for fault recovery value is 60 seconds. Press "▲" or "▼" to modify the time for fault recovery, and the modification range is 2 to 512 seconds.
- Press "setting" again to set the power-on time. The Nixie tube displays "2". "2" means that the eighth parameter set is the power-on time, "2" means that the default delay time for power-on is 2 seconds, press "▲" or "▼" key to modify the power-on delay time value, modification range is 2- 512 seconds;
- Press the button "setting" again to set the way to reset. The Nixie tube displays "AU". "AU" indicates that the ninth parameter set is the reset selection mode, and "AU" indicates that the automatic fault reset mode is a defaulted option. Press the "▲" button to modify the fault reset mode to "HA", which indicates the manual reset. Press "▲" button to select "AU" and convert to the automatic reset mode. When the manual reset mode HA is selected, the protector will not supply power automatically after it is powered on. It is necessary to manually press the "setting" to switch on the power supply. When the line voltage fault occurs due to opening, the protector will not restore the power supply even after the line fault is removed. It is necessary to manually press "setting" on the protector for power restoration.
- Press the button "setting" again, the Nixie tube displays "1 UL". "1 UL" indicates that the tenth parameter set is the last fault inquired. "1UL" indicates that the last fault is under-voltage. UL is under-voltage, UH is over-voltage, For example, 1UH displayed indicates that the last fault is over-voltage. Press the "▲" button to query the last 5 faults.
- Press "setting" again, and the Nixie tube displays "End". Then the setting is completed. Press "setting" again, and the protector will save the data. Exit the setting state and enter the operation one, and the Nixie tube will display the present voltage value.  
**Attention! After modifying the parameters and entering "setting", you must follow the steps until "END" is displayed finally and then press "setting" to save data, otherwise the modification will be invalid.**
- After pressing "setting", if there is no operation within 10 seconds, the device state will be automatically exited and the parameters modified will not be saved.
- Factory data reset: Press and hold the "▲" and "▼" buttons simultaneously for 3 seconds, and the Under-voltage indicator will be off for 1 second, indicating that the default parameter value of restoring factory settings is completed.
- Over-/under-Voltage indicator: The over-voltage indicator flashes quickly in case of over-voltage, The under-voltage indicator flashes slowly in case of under-voltage, and it is constantly on in case of normal voltage.
- Sign of warranty period: During the warranty period, the over-voltage indicator and the under-voltage indicator are constantly on. After the warranty period, they are off under the normal conditions. Only when the voltage exception occurs, they will flash.

## IMPORTANT NOTICES

- When carrying out various operations or tests, you shall follow the relevant procedures and focus on the following items to ensure proper and safe use.
- Wire the input and output ends properly according to the product identification. 5.3 Line conductors shall meet the relevant current standard values, and the load current shall not exceed the maximum protection current values of the protector.
- The neutral line N shall be connected properly and securely. The zero line N of the protector shall be directly connected, and it has no disconnection function.
- Check the wiring carefully before powering on.
- After the product is powered on, do not touch the live parts to avoid electric shock accidents.
- This protector has no short-circuit protection function and it shall work with miniature circuit breaker. If the miniature circuit breaker is not used for protection, the short circuit current will not be broken when there is a short circuit fault at the input or output ends of the protector.
- The protector has self-resetting function. After the overcurrent protector performs protection and disconnection, the load appliance shall be removed immediately, and the circuit line shall be checked. Otherwise, the protector will frequently switch on the load appliance, which will eventually damage the electrical appliance and the protector body.
- The protector has no isolation function. It shall work with the miniature circuit breaker, break off the former circuit breaker switch when repairing the circuit line.
- Notice! When the break time of under-voltage exceeds 0.3 seconds, the protector will not open after the power fault. (MCU will not work with power lossing after 0.3 seconds of power fault)**