



**EVOLEC**

CATALOGUE

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EVOLEC AUSTRIA (AT) 

# EVOLEC



WIFI



SMART LIFE



TUYA SMART



WIFI CIRCUIT BREAKER  
ELWB-P-2P 63A

# WIFI Circuit Breaker








## ELWB-P-2P 63A

### General

The intelligent remote-control switch is suitable for users or loads with AC50Hz/60Hz, rated operating voltage of 230V, and rated working current of 63A and below. It has a beautiful appearance, excellent performance, and reliable operation. It can quickly switch on/off and is installed with a modular rail. It is mainly used in homes, shopping malls, office buildings, hotels, Schools, hospitals, villas, and other places.



### Features

-  Smart WiFi Remote control: mobile phone APP or computer remote control opening/closing.
-  Timing: delay opening/closing.
-  Sharing control: can share control with multiple people.
-  Real-time feedback: real-time feedback of product opening/closing status.
-  Voltage and Current meter.
-  Voltage and Current protection.
-  Auto-closing: The product can automatically close the circuit when power is supplied during normal operation on the line, and can also be set to not close the circuit when power is supplied.

 Standards: IEC/EN 60947, IEC/EN 50557, EN 301 489, EN 300 328, IEC/EN 61000

### Technical data

Parameter	Data
Rated working voltage:	AC230V
Rated current In:	1-63A
Rated frequency:	50/60 Hz
Electrical life	100000 on/off times.
Power consumption:	<3W.
Working voltage range:	AC110V-280V.
Wiring:	Using clamp terminals, the cross-sectional area of the wire can reach 16mm
Installation:	Installed on a standard TH35 rail.
RS485 communication:	Baud rate: 9600
communication address range:	1-247

# WiFi Circuit Breaker

## ELWB-P-2P 63A

### Working environment

- Ambient air temperature:  $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$ , the average value within 24 hours does not exceed  $+35^{\circ}\text{C}$

- Limiting service temperature:  $-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$

- Altitude: The altitude of the installation site does not exceed 2000 meters

- Humidity:

- 1.When the ambient air temperature is  $+40^{\circ}\text{C}$ , the relative humidity of the air should not exceed 50%, and there can be a higher relative humidity at a lower temperature.

- 2.When the monthly average minimum temperature of the wettest month is  $25^{\circ}\text{C}$ , the monthly average relative humidity is 90%.

- 3.Condensation on the product surface due to temperature changes has been taken into account.

- Pollution degree: Level 2

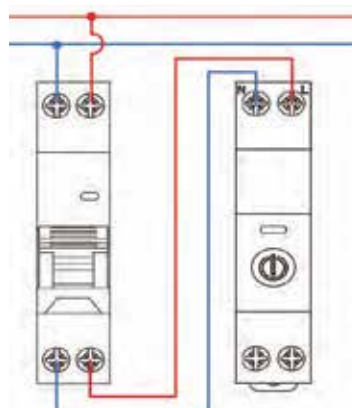
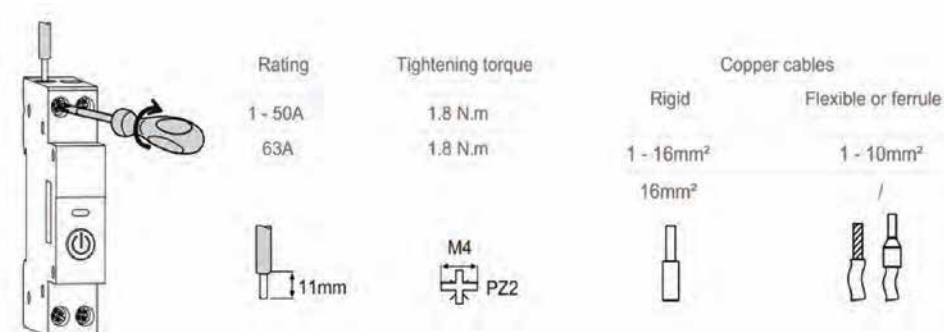
- Installation Category: Class II and III.




### Overall and mounting dimensions(mm)





### Connection



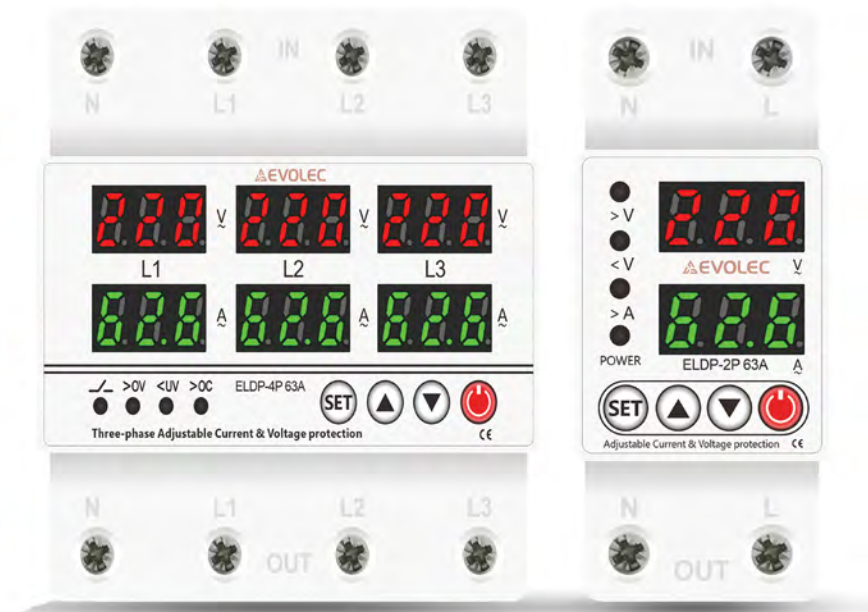
# EVOLEC

- 

OVER CURRENT PROTECTION
- 

OVER VOLTAGE PROTECTION
- 

UNDER VOLTAGE PROTECTION



## MODULAR DIGITAL VOLTAGE & CURRENT PROTECTOR

# Modular Digital Voltage & Current Protector

## ELDP-2P 63A

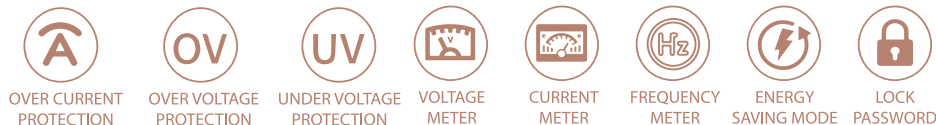
### General

Voltage and current display relays are microprocessor-based voltage monitoring devices for single-phase AC networks to protect electrical equipment from surge voltage. The device analyzes the main voltage and displays its current value on a digital indicator. Load is switched by electro-magnetic relay. The user can set the current voltage value and delay time through the button. The value is stored in non-volatile memory. Aluminum wires and copper wires can be used for connection.



### Features

- Undervoltage protection.
- Overvoltage protection.
- Overcurrent protection.
- Working under meter mode/Volt-Current-Frequency.
- Energy saving mode.
- Lock Password.
- 19 adjustable functions.



### Application

Voltage and current display relay used in administrative, industrial, and residential buildings and has the function of protecting single-phase lines.

- PV systems
- Home applications

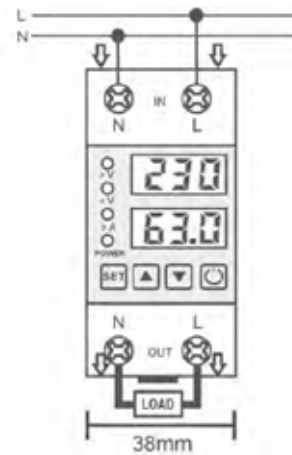
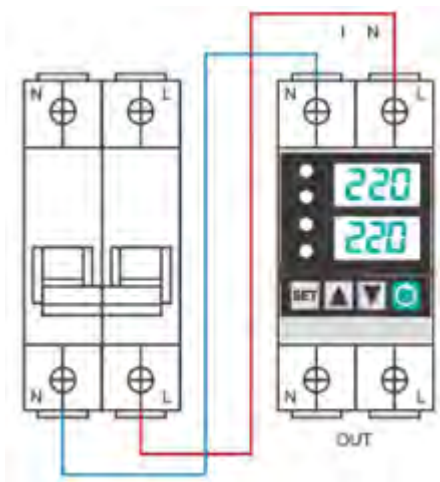
### Technical data

Parameter	Data
Rated supply voltage:	220VAC
Rated frequency:	50/60Hz
Max. operating phase voltage:	350V
Max. operating current:	63A
Max. power of load(kW):	13.9 kW
>U setting range:	130-300V
<U setting range:	80-210V
Voltage hysteresis:	5V
Overvoltage trip delay:	0.5s
Voltage accuracy:	<1%
Altitude:	≤2000m
Permissible relative humidity:	≤50% at 40°C (without condensation)
Storage temperature:	-25°C to +55°C
Ambient temperature:	-25°C to +50°C
Net weight:	159g.
Size:	81•36•66mm

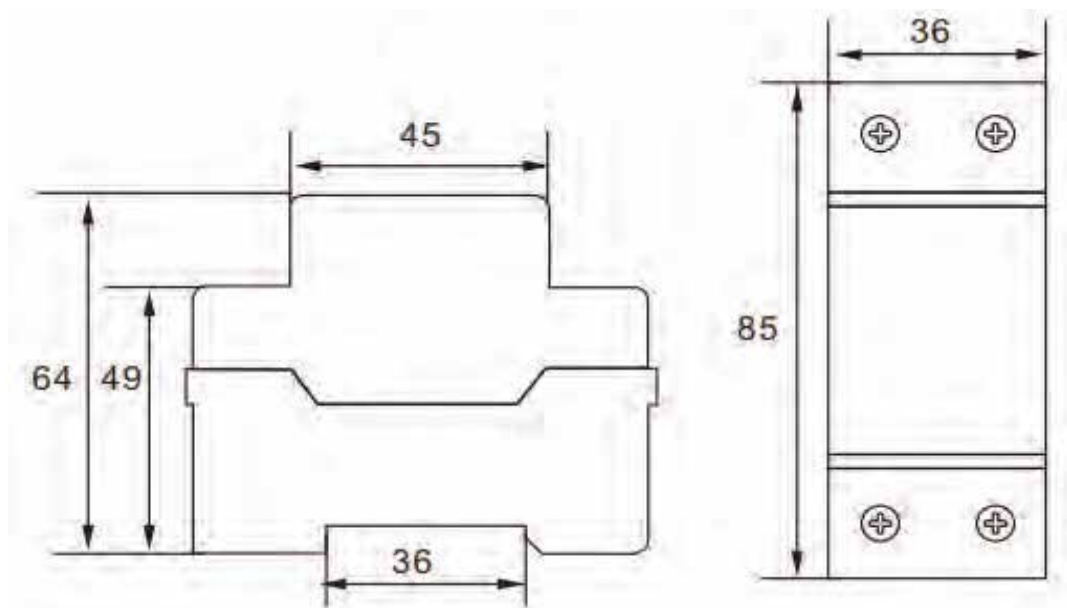
# Modular Digital Voltage & Current Protector

**ELDP-2P 63A**

## Wiring Diagram



## Overall and mounting dimensions(mm)



# 3-PHASE Modular Digital Voltage & Current Protector

**ELDP- 4P 63A /100A**

## General

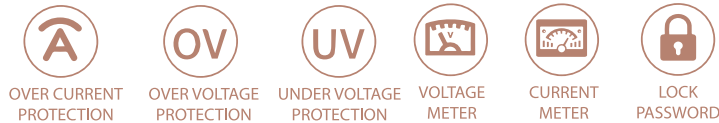
Voltage and current display relays are microprocessor-based voltage monitoring devices for 3-phase AC networks to protect electrical equipment from surge voltage. The device analyzes the main voltage and displays its current value on a digital indicator.

Load is switched by electro-magnetic relay. The user can set the current voltage value and delay time through the button. The value is stored in non-volatile memory. Aluminum wires and copper wires can be used for connection.



## Features

- Undervoltage protection.
- Overvoltage protection.
- Overcurrent protection.
- Imbalance protection.
- Phase sequence protection.
- Voltage and current meter.
- Lock Password.
- 16 adjustable functions.



## Application

Voltage and current display relay used in administrative, industrial and residential buildings and has the function of protecting Three phase lines.

- Solar systems
- Home applications
- Industrial applications.

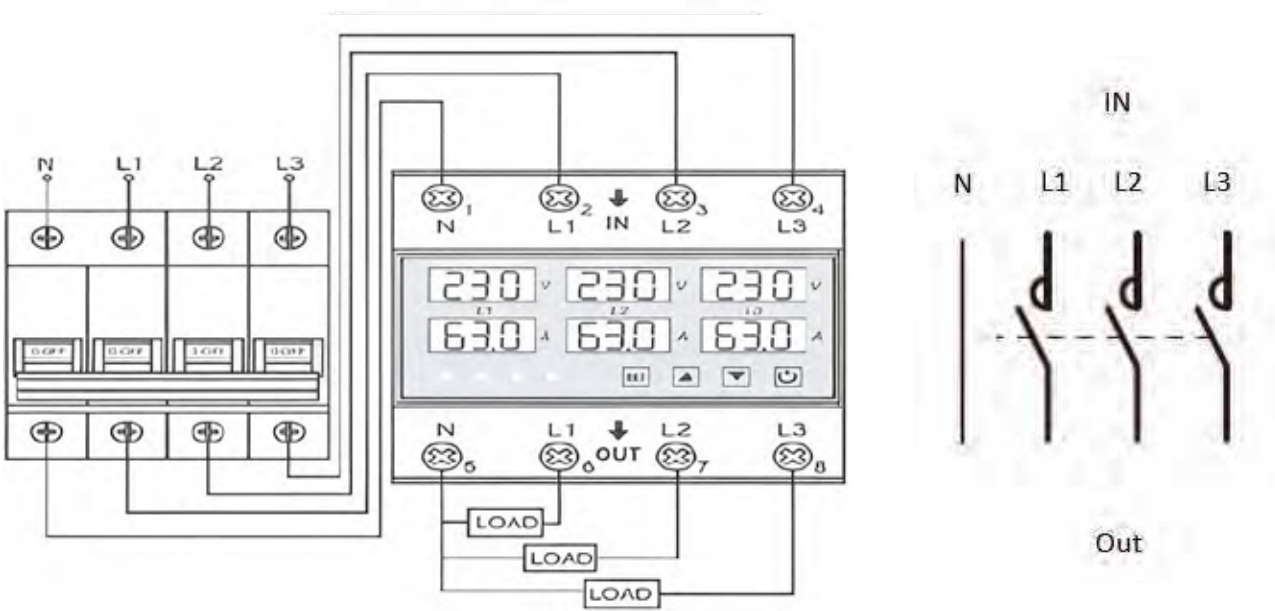
## Technical data

Parameter	Data
Rated supply voltage:	230VAC
Operation voltage range:	80-300 VAC
Rated insulation voltage:	450VAC
Rated frequency:	50/60Hz
Rated current:	63A/100A
Over voltage setting range:	130-300V
Under voltage setting range:	80-210V
Voltage hysteresis:	5V
Voltage accuracy:	1%
Altitude:	≤2000m
Protection degree:	IP20
Permissible relative humidity:	<50% at 40°C (without condensation)
Net weight:	388g
Size:	96•90•66mm

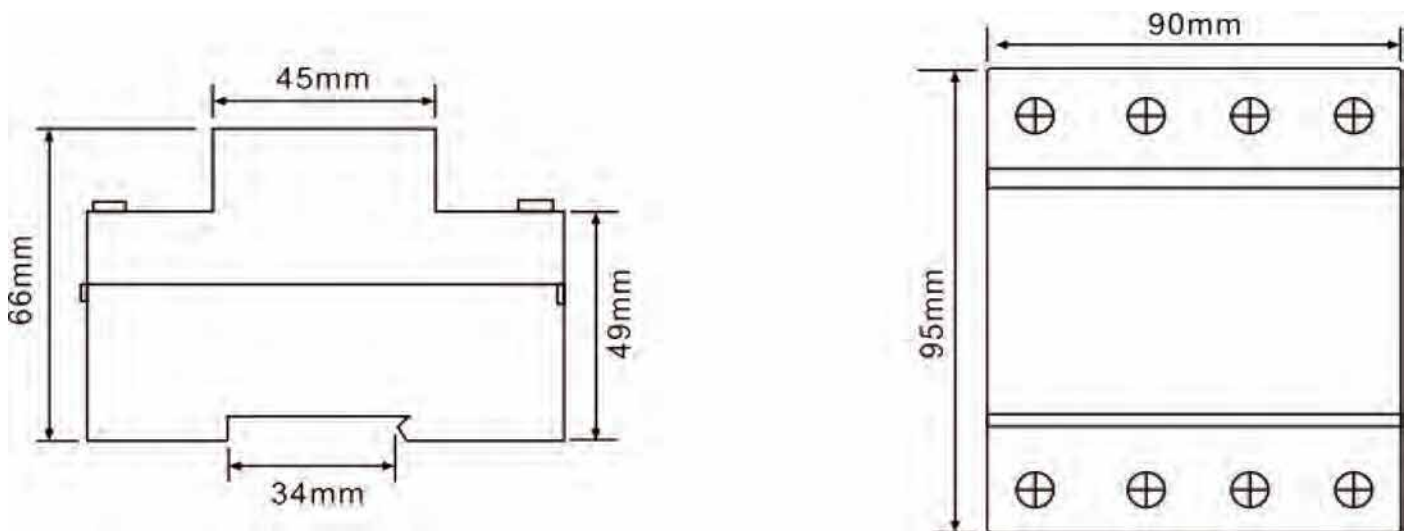
# 3-PHASE Modular Digital Voltage & Current Protector

**ELDP- 4P 63A /100A**

## Wiring Diagram



## Overall and mounting dimensions(mm)



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**MODULAR DIGITAL VOLTAGE & CURRENT PROTECTOR WITH ENERGY METER**

# Modular Digital Voltage & Current Protector with energy meter

## ELDP-KWH-2P 63A

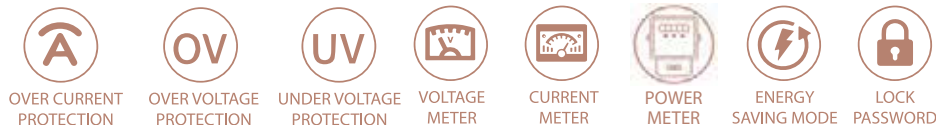
### General

Voltage and current display relays are microprocessor-based voltage monitoring devices for single-phase AC networks to protect electrical equipment from surge voltage. The device analyzes the main voltage and displays its current value on a digital indicator and measures energy consumption in KWH. Load is switched by electro-magnetic relay. The user can set the current, voltage value and delay time through the button. The value is stored in non-volatile memory. Aluminum wires and copper wires can be used for connection.



### Features

- Undervoltage protection.
- Overvoltage protection.
- Overcurrent protection.
- Working under meter mode/Volt-Current-Frequency.
- Energy meter.
- Lock Password.
- 15 adjustable functions.



### Application

Voltage and current display relay used in administrative, industrial, and residential buildings and has the function of protecting single-phase lines.

- PV systems
- Home applications

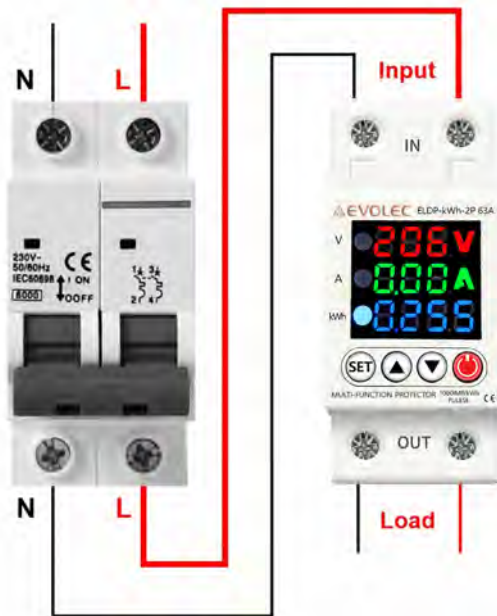
### Technical data

Parameter	Data
Rated supply voltage:	220VAC
Rated frequency:	50/60Hz
Operation Voltage Range:	AC 80V-300V (single phase)
Max. operating current:	63A
Max. power of load(kW):	13.9 kW
>U setting range:	130-300V
<U setting range:	80-210V
Voltage hysteresis:	5V
>U and <U trip delay:	0.5s
Voltage accuracy:	<1%
Altitude:	≤2000m
Permissible relative humidity:	≤50% at 40°C (without condensation)
Storage temperature:	-30°C to +70°C
Operating temperature:	-50°C to +55°C
Net weight:	145g.
Size:	81•36•66mm

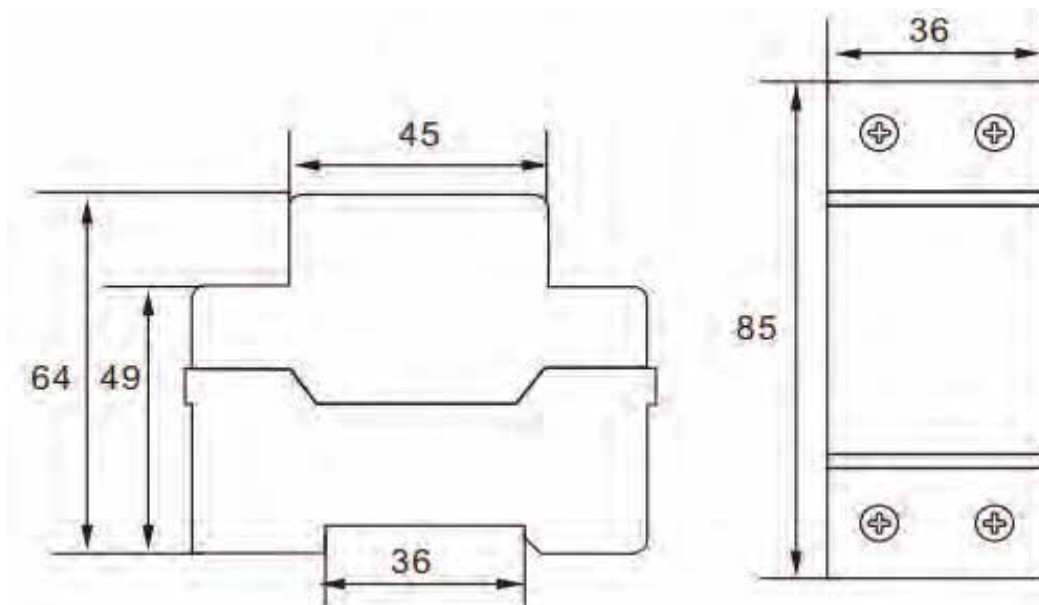
## Modular Digital Voltage & Current Protector with energy meter

ELDP-KWH-2P 63A

### Wiring Diagram



### Overall and mounting dimensions(mm)



# EVOLEC



## MANUAL TRANSFER SWITCH ELMTS 63A

# manual transfer switch

## ELMTS 63A

### General

The Changeover Switch can switch on load, and break the circuit under normal conditions.



### Features

- Heavy duty
- 2 sources changeover

### Application

- Home applications. 
- PV solar systems 



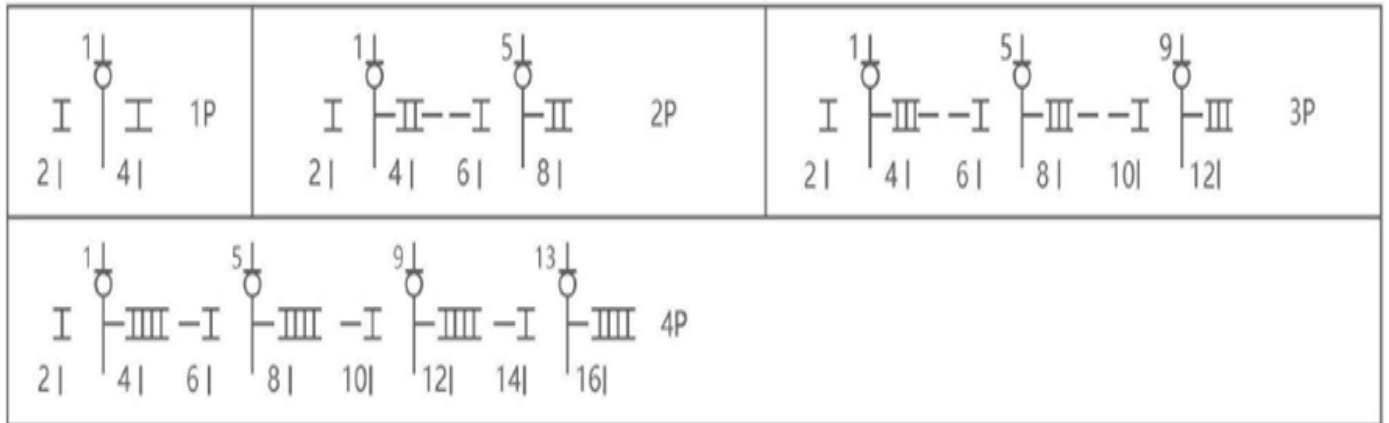
### Technical data

Parameter	Data
Rated Voltage:	230/400VAC
Rated Current:	63A
Rated Frequency:	50/60Hz
Contact form:	1-0-2
Electrical Life:	1500 Cycles
Mechanical Life:	8500 Cycles
Protection degree:	Ip20
Ambient Temperature:	-5°C ~ +40°C
Poles:	(1,2,3,4) P
Terminal/Cable size:	16mm <sup>2</sup>
Standard:	IEC 60947-3
Mounting:	On DIN rail EN60715(35mm) by means of fast clip device.

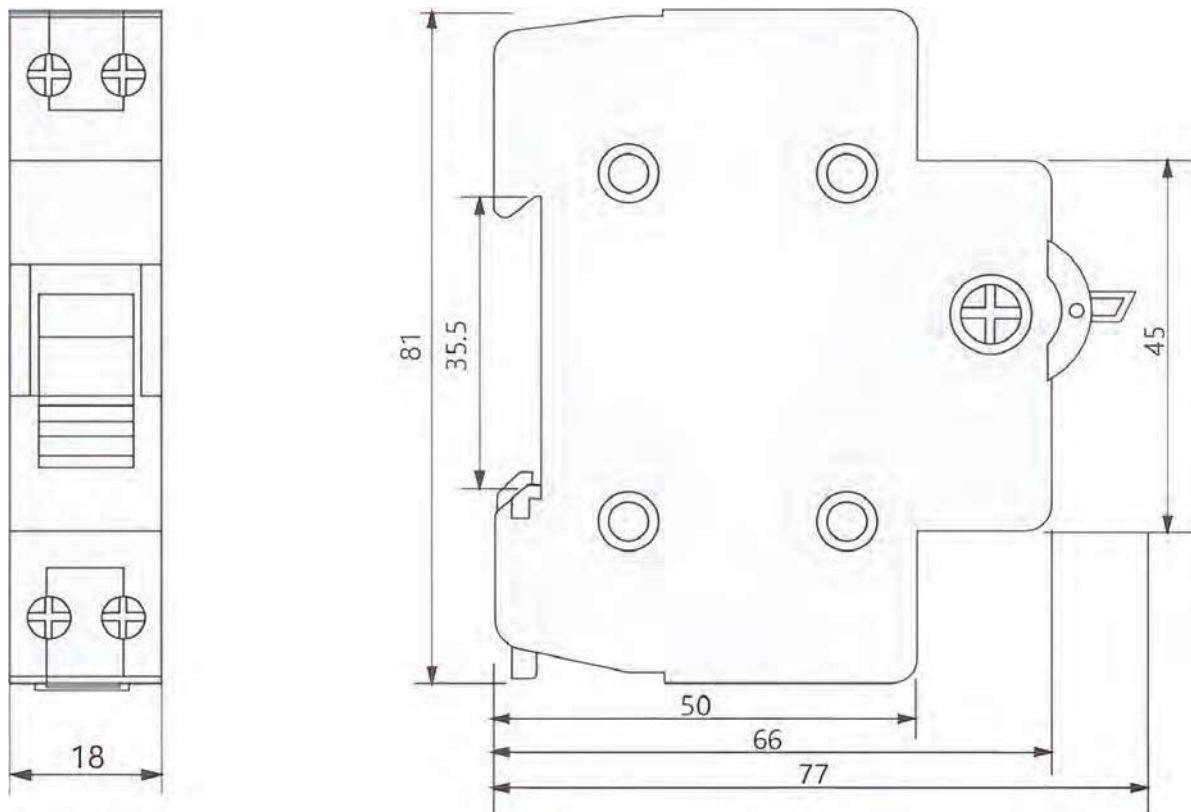
# manual transfer switch

## ELMTS 63A

### Wiring Diagram



### Overall and mounting dimensions(mm)



# EVOLEC



AUXILIARY CONTACT



AUTOMATIC/MANUAL SWITCHING



2 SOURCES CHANGEOVER



## AUTOMATIC CHANGEOVER SWITCH ELATS 125A

# Automatic change over switch

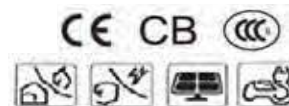
## ELATS 125A

### General

Ensure uninterrupted power supply for your critical applications with modular double power automatic changeover switch.

The switch is suitable in power supply system with 50/60Hz, rated voltage up to 400V and rated up to 125A. The seamless automatic switching between common and standby power supply ensures a reliable energy backup, perfect for high-rise buildings, shopping malls, fire pumps, smoke elimination fans, elevators, and emergency lighting applications. Trust in its versatility and reliability to keep your critical systems running without interruption.




EALTS Double Power Automatic Changeover Switch is a reliable and efficient solution crafted with premium materials. Seamlessly transfer power between common and standby sources, ensuring uninterrupted electricity supply during outages



### Functions

- 2 sources automatic changeover.
- 2 sources manual changeover.
- Auxiliary contacts for indicator or control.
- Ability to prioritize the power source.

### Application

-  Distribution systems.
-  PV solar systems.
-  Home and industrial applications.

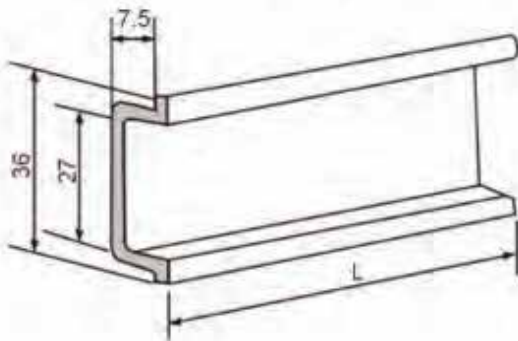
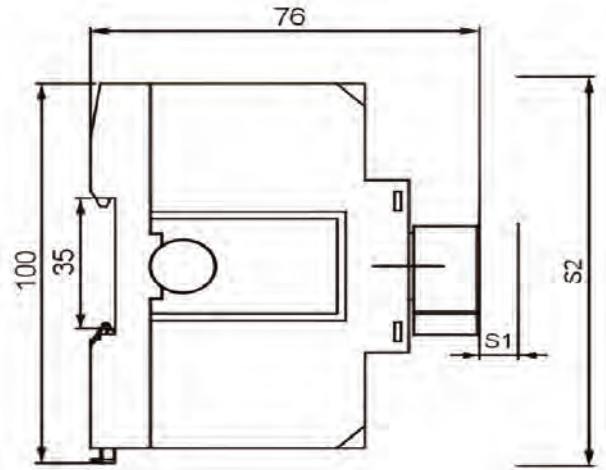
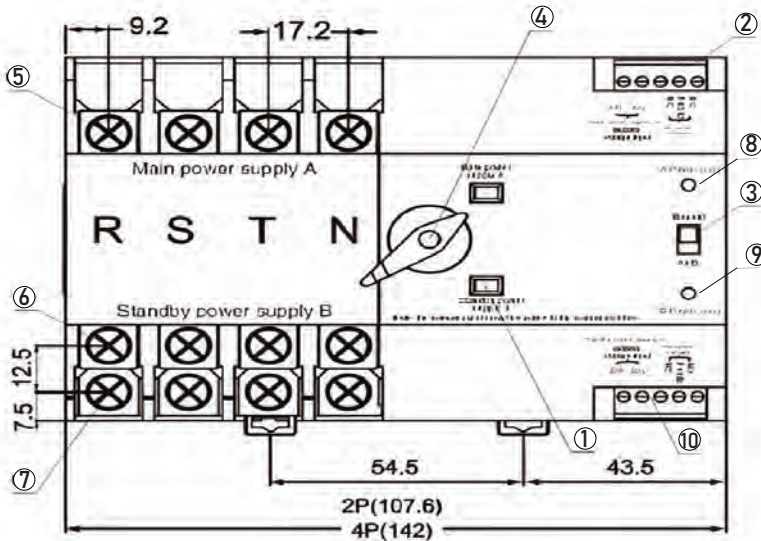
### Technical data

Parameter	Data
Rated voltage $U_e$ :	400VAC
Rated current $I_e$ (A):	125A
Insulation voltage $U_i$ :	690VAC
Utilization category:	AC-31 B
Poles :	2P, 4P
Electrical life:	2000 times.
Manual operation:	5000 times.
Rated short circuit current $I_a$ :	50kA
Rated impulse withstand voltage:	8kV.
Control circuit: Rated control voltage $U_s$ :	220VAC/50Hz Normal working conditions:85-110% $U_s$
Auxiliary circuit:	2 relays.
each with two sets of contact converter contact capacity:	220VAC/50Hz
Conversion time of contactor:	<50ms
Operation conversion time:	<50ms
Return conversion time:	<50ms
Power off time:	<50ms
Standard:	IEC609471-6

# Automatic change over switch

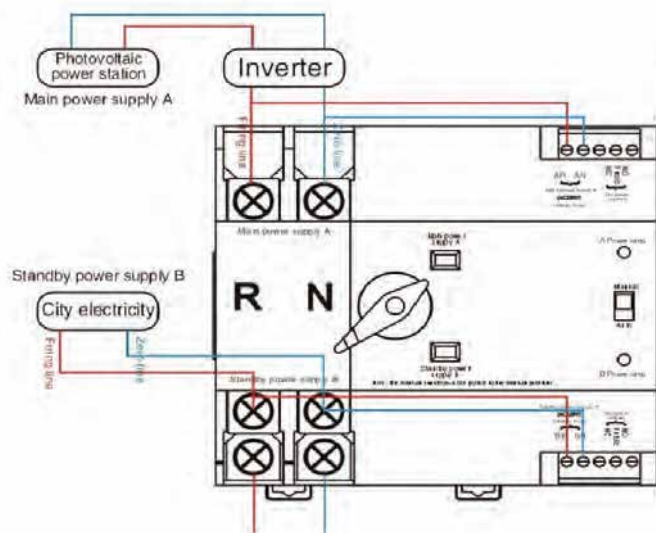
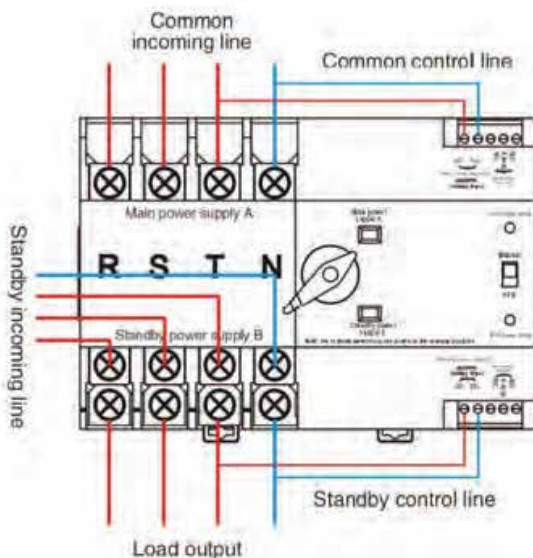
## ELATS 125A

### Overall and mounting dimensions(mm)







- ① Status position indication
- ② Main power terminal and passive signal(AC220V)
- ③ Manual / automatic switch
- ④ Manual handle
- ⑤ Main terminal of common power side
- ⑥ Main terminal of standby power side
- ⑦ Main terminal of load connection side
- ⑧ A power indicator
- ⑨ B power indicator
- ⑩ Standby power terminal and passive signal(AC220V)

### Wiring Diagram



# EVOLEC

-   
POWER METER
-   
WIFI
-   
SMART LIFE
-   
TUYA SMART



**SMART HOME WIFI SOCKET  
ELWS-EU 16A**

# SMART HOME WIFI SOCKET

## ELWS-EU 16A

### General

Fully integrated smartLife WIFI socket to switch loads on/off quickly and easily by tuya smart mobile application or manually.

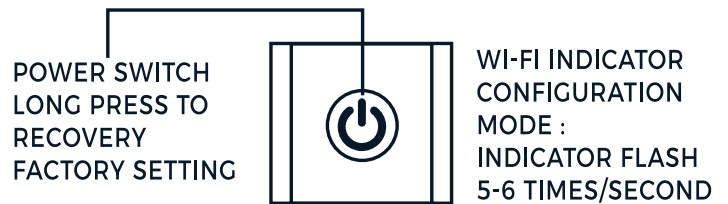


### Application

Home applications  
Commercial application

### Features

- Timer programmable control
- Countdown switch control
- power meter function
- power indicator
- children protector
- ground pin
- Each socket can be controlled alone (2-way type)



### Technical data

Parameter	Data
Types:	1-way / 2-way
Rated voltage:	230 VAC
Rated current:	16A
Maximum Power:	Up to 3680W/230V~(Resistive)
Rated frequency:	50-60Hz
TUYA frame	platform
WIFI module:	WB2S/CB2S
Wireless Type:	2.4GHz
Operating Humidity:	≤85%RH
System Support:	iOS/Android
Operation Temperature:	-10C ~ +40C
Certificates:	CE, RoHS2.0, REACH, PAHS

### Overall and dimensions



# EVOLEC



WIFI



SMART LIFE



TUYA SMART



MINI SMART SWITCH ELWS-MINI 16A

# Mini Smart Switch

## ELWS-MINI 16A

### General

The Tuya Mini 16A WiFi Smart Switch is a compact and powerful smart home automation module designed to transform traditional switches and appliances into smart, controllable devices. Its mini body allows for easy installation within most standard mounting boxes.



### Application

Home applications  
Commercial application



### Features

- Timer programmable control
- Countdown switch control
- High Power Capacity
- Mini Body Design
- App Remote Control

### Technical data

Parameter	Data
App:	Smart Life / Tuya Smart
Color:	White
Rated current:	16A
Output:	AC 100-240V 50/60Hz
Input:	AC 100-240V 50/60Hz
Wi-Fi Standard:	IEEE 802.11b/g/n 2.4GHz
Material:	PC V-0
Certifications:	CE, ROHS, FCC
Maximum Current:	16A
System Support:	iOS/Android
Dimensions:	42mm x 42mm x 20mm
Rated Frequency:	50/60Hz

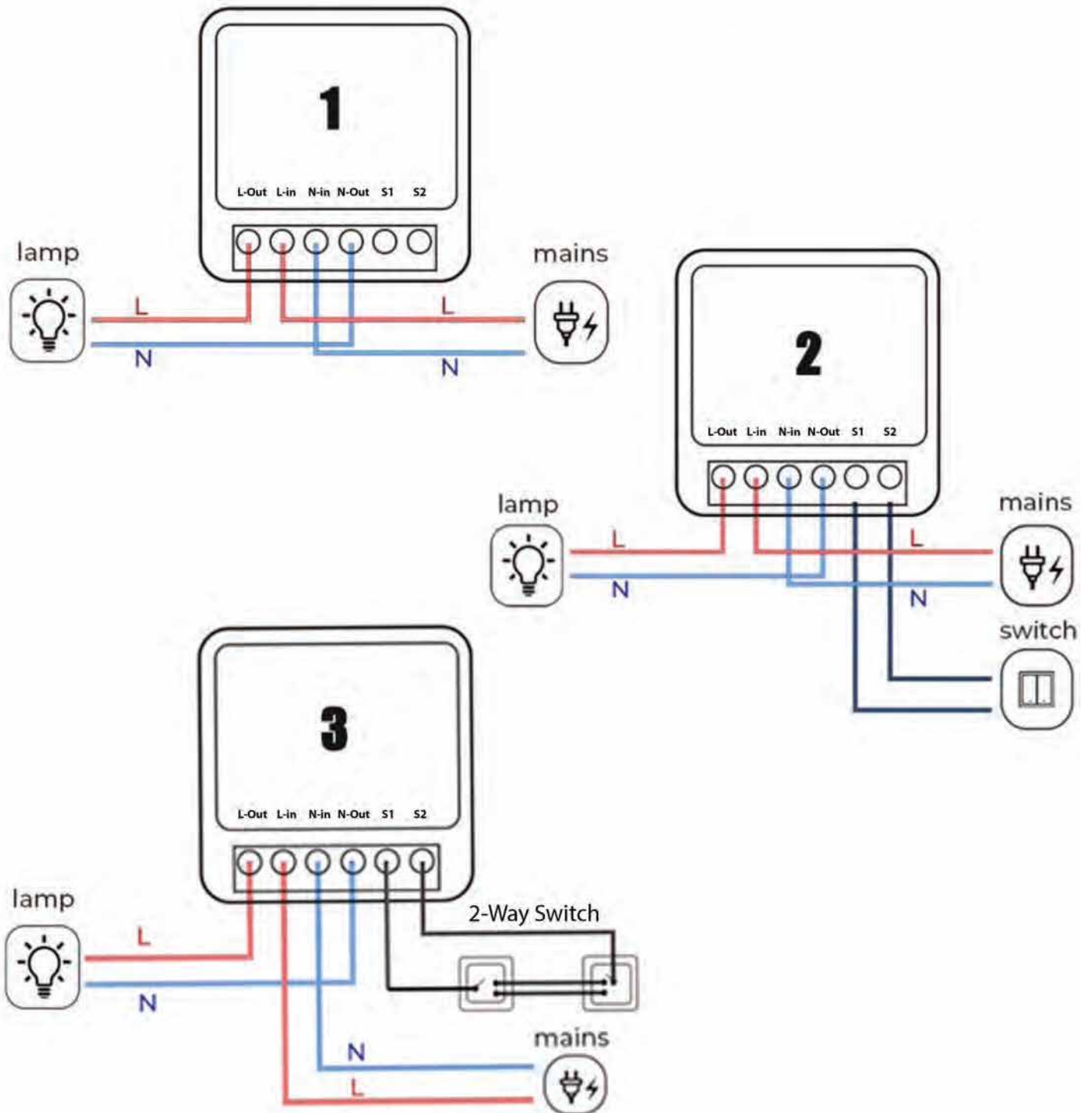
# Mini Smart Switch

ELWS-MINI 16A

## Wiring Diagram

### Three wiring methods

Input and Output can't be reversed



# EVOLEC



TUYA SMART



WIFI



ENERGY  
METER



SMART LIFE



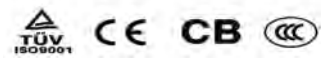
**WIFI NETWORK ANALYZER & PROTECTOR  
ELWNA-P-100A**

# WIFI Network analyzer and Protector

## ELWNA

### General

Full Protection, control and monitoring for your (2Poles/single phase), and (4Poles/Three phase) systems, ELWNA is a new generation of WIFI network analyzer and protector, designed to achieve the highest benefits for users.



### Functions

- Pole:2P single phase /4P three phase
- Over-Voltage Protection
- Under-Voltage Protection
- Over-Current Protection
- Under-Current Protection
- Delay Protection
- Timer Switch
- Bidirectional Energy Monitor
- Current Leakage Protection
- High Temperature Protection (Can only be set on App)
- Phase sequence protection /three phase model (set by application)
- Shortage phase protection/ three phase model (set by application)
- Three phase voltage impedance protection / three phase model (set by application)
- Three phase current impedance protection / three phase model (set by application)
- Each parameter can be set with action threshold and on/off.

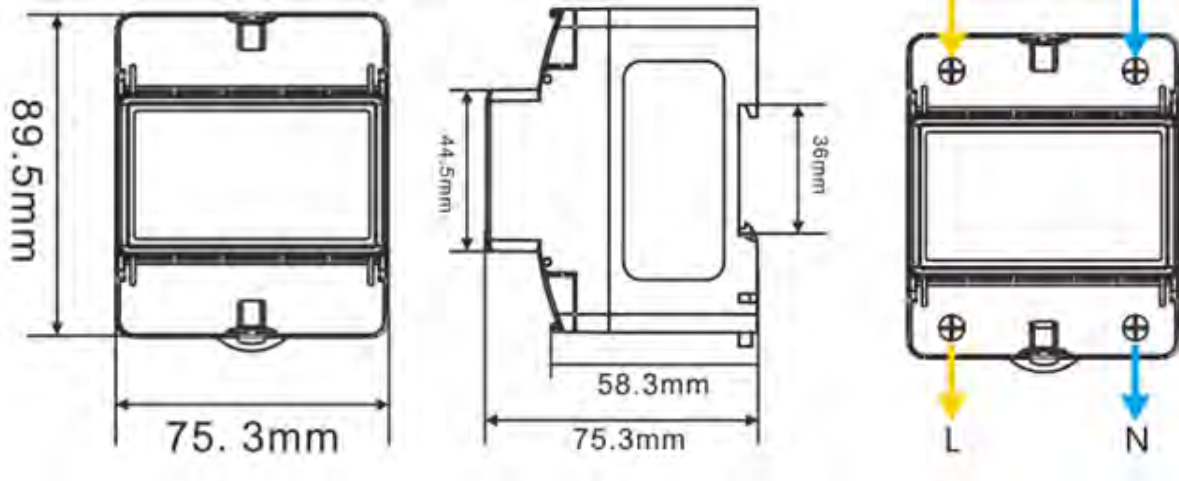
### Application

- Industrial panels and applications.
- Commercial applications.
- Home applications.
- Distribution systems.
- Pumping systems.
- PV solar systems.

# WIFI Network analyzer and Protector

## ELWNA

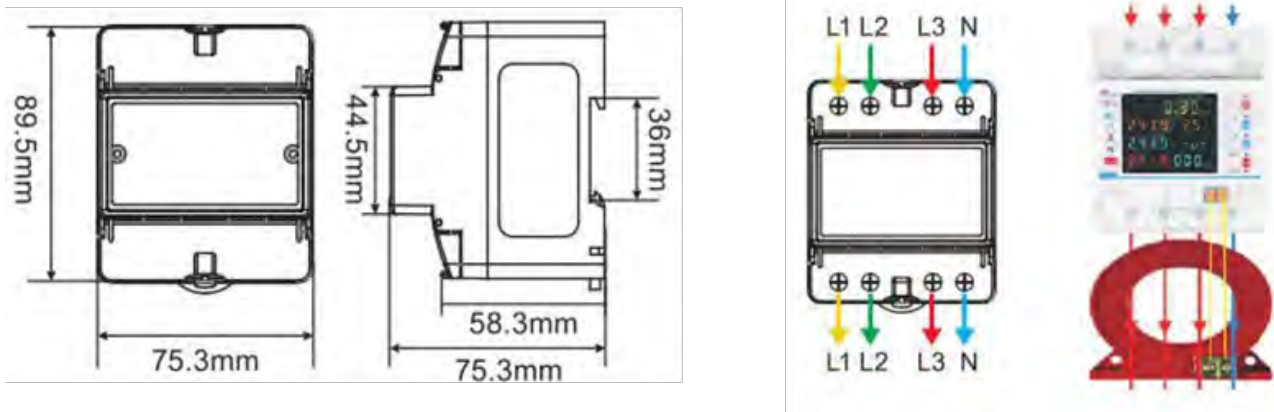
### Overall and mounting dimensions(mm) /2P single phase



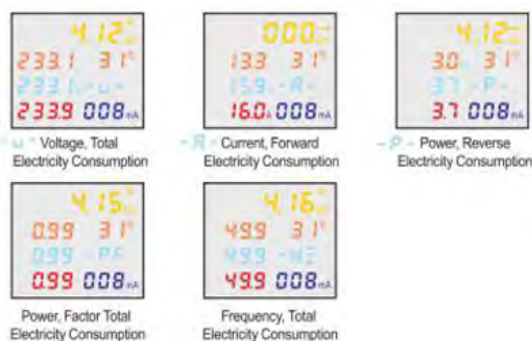
### Display Mobe



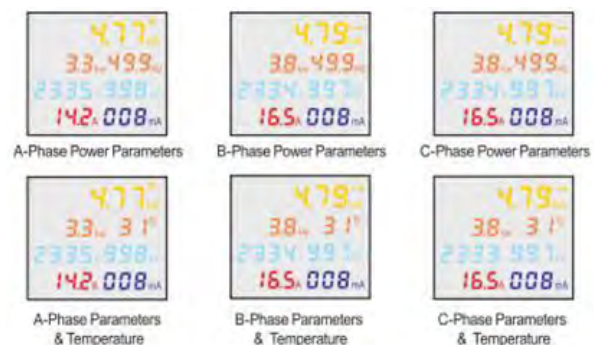
### Overall and mounting dimensions(mm) /4P Three phase



### Display mode 1



### Display mode 2



# EVOLEC



LONG SERVICE  
LIFE



HIGH CONTACT  
CAPACITY



BUILT-IN  
LITHIUM BATTERY



**7 DAYS PROGRAMMABLE DIGITAL  
TIMER CONTROL**

## TIME SWITCH Relay

### ELWDT-D

## General

ELWDT-D is the best weekly/daily timer to control and program your device on and off, equipped with high-capacity contacts in order to connect directly to the load without a contactor or outer relay. Cost-effective choice, there are very diverse features and flexible installation, and a wide range of applications including commercial and industrial lighting and equipment control.



## Features

- Easy installing.
- advanced pre-setting one week before.
- Digital electronic general purpose time switch with delay and programs
- Repeat programs with (16 ON) and (16 OFF) settings ,18-time pulse programs
- Manual on/off.
- Lithium battery power reserve when power is off.
- Easy programing
- Auto time error correction,  $\pm 30s$ , weekly.
- 30A direct connection output relay.



## Application

- Control systems.
- PV systems.
- Home and industrial applications.

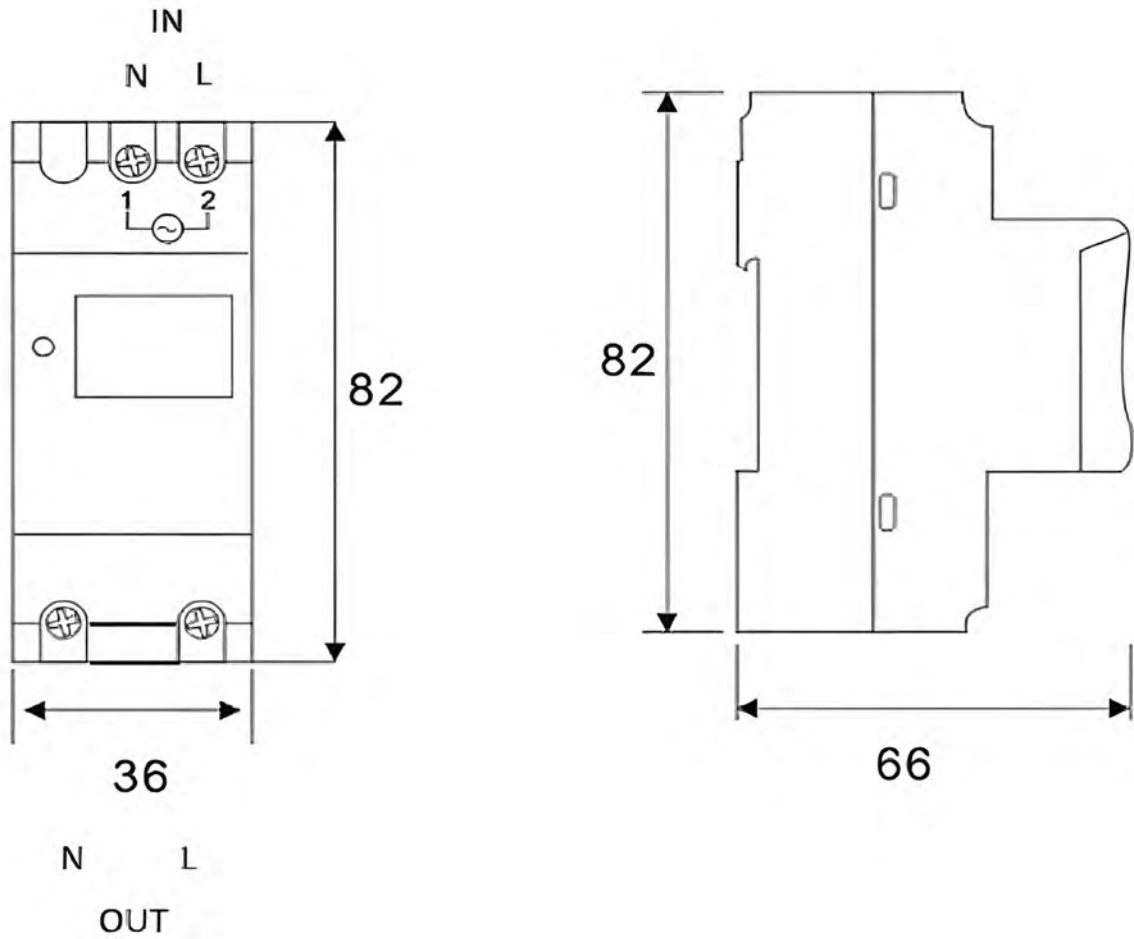
## Technical data

Parameter	Data
Operating voltage:	AC 220-240V 50/60Hz
Voltage limit	$\pm 10\%$ .
Power consumption:	7.5VA
Display:	LCD
Mechanical life:	10,000,000 times
Electrical life:	100,000 times
Operating temperature:	-10~+40°C
Accuracy:	$\leq 1s/d$ (25°C)
On/off setting:	16 ON/16 OFF
Minimum interval:	1 minute
Power control and contact:	30A

# TIME SWITCH Relay

## ELWDT-D

### Dimension



# EVOLEC



**SURGE PROTECTOR SPD  
ELSP-2P**

# SURGE PROTECTOR

## ELSPD

### General

When surge overvoltage occurs in the system due to lightning stroke or other reasons, the protector immediately conducts in nanoseconds to introduce the surge overvoltage to the earth, thus protecting the electrical equipment on the grid.



### Functions

- Has two types of protection, which can meet Class I [10/350  $\mu$ s waveform] and Class II [8/20  $\mu$ s waveform] SPD test, and voltage protection level  $U_p \sim 1.5kV$ .
- Large-capacity SPD, maximum discharge current  $I_{max} = 40 kA$ .
- Pluggable module.
- Based on zinc oxide technology, it has no power frequency after current and a fast response speed, up to 25ns, the green window indicates normal, and the red indicates a defect, and the module needs to be replaced.
- Dual thermal disconnection device provides more reliable protection.
- Remote signal contacts are optional.
- Its surge protection range can be from power system to terminal equipment.
- It is applicable to direct lightning protection and surge protection of DC systems such as PV combiner box and PV distribution cabinet.

### Application

- PV systems.
- Earthing systems.
- Home protection systems.
- Lightning protection.
- Surge protection.

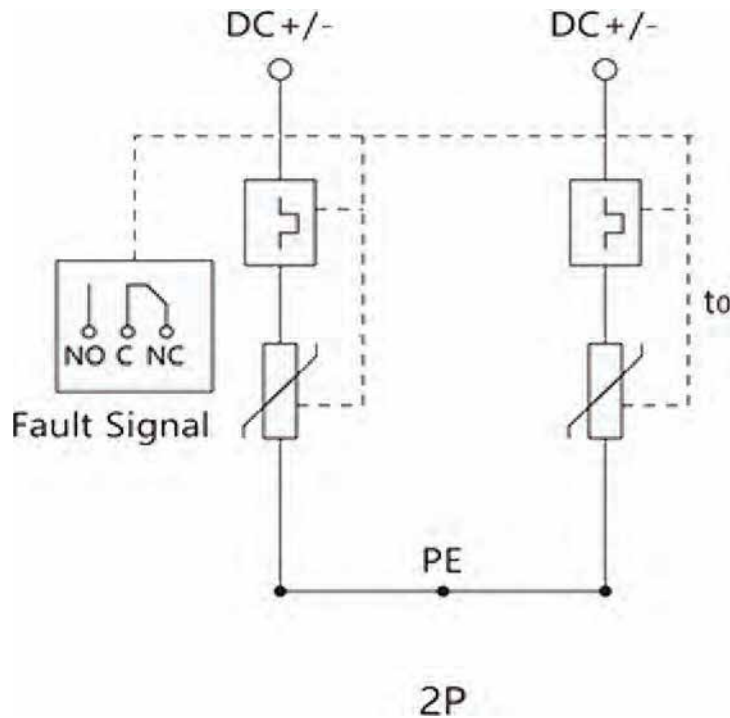
### Technical data

Parameter	Data
Pole:	2P
Rated Working Voltage $U_e$ (V):	500VDC/1000VDC
$U_p$ (kV):	2.2 / 3 .6
Classified Test:	II
$I_n$ (8/20) $\mu$ s (kA):	20
$I_{max}$ (8/20) $\mu$ s (kA):	40
Standard:	IEC6164-31
Operating Temperature:	-30°C to +70°C
Humidity:	$\leq 95\%$
Altitude:	2000m
Installation:	35mm DIN Rail
Product Size (mm):	65*36*90

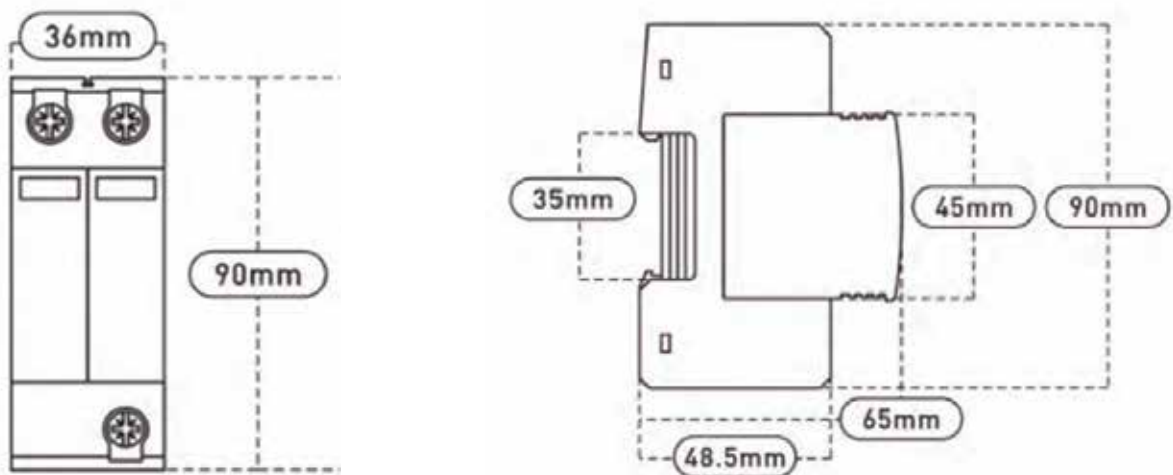
# SURGE PROTECTOR

## ELSPD

### Wiring Diagram



### Overall and mounting dimensions(mm)



### Failure release device, Alarm release device

The surge protective device is equipped with a failure protection device. When the protector is broken down due to overheating, the failure protection device can automatically disconnect it from the power grid and give an indication signal.

# EVOLEC



FIRE RESISTANCE  
MATERIAL



PROTECTION  
DEGREE : IP20



**MODULAR EUROPEAN STYLE SOCKET**

## Modular European Style Socket

### ELMS-EU 16A

### General

The socket, mounted in an easily accessed position, provide a quick connection for assembly tools, servicing equipment, and other electrical equipment.



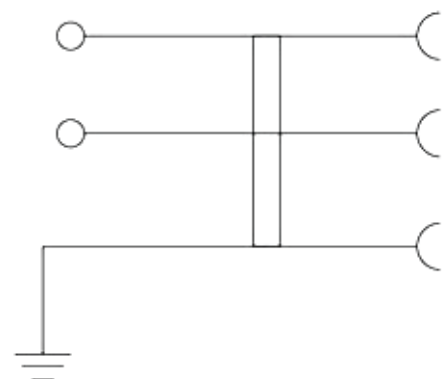
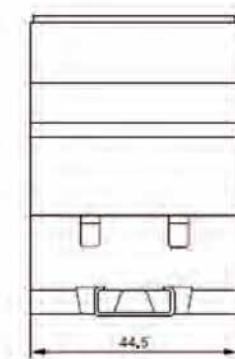
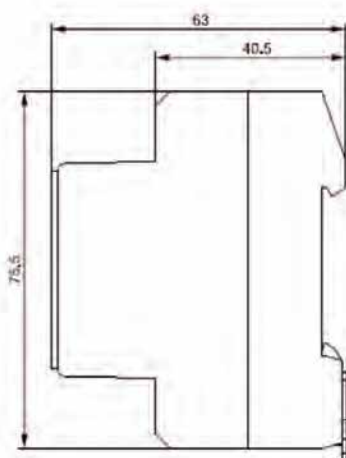
### Application

- Industrial panels
- Home applications

### Technical data

Parameter	Data
Rated voltage:	250 VAC
Rated current:	16A
Rated frequency:	40-60Hz
Protection degree:	IP20
Contacts:	CuZn37
Operation Temperature:	-20 C ~ +60 C
Quality certificates:	CE, VDE
Earthing connection	available
Installing:	35mm Din-rail

### Overall and dimensions and Wiring



# EVOLEC



NON  
POLARIZED



THERMAL  
PROTECTION



ELECTROMAGNETIC  
PROTECTION



UNDERLOAD  
DISCONNECTING



SHORT CIRCUIT  
PROTECTION



DC MCCB  
ELMDC-250PV-2P

# DC MCCB (Breaker non-polarity & Circuit protection)

## ELMDC

### General

Directly control the on-off of the circuit through the handle, which is convenient for daily maintenance or quick cut-off of the power

supply in emergencies. When the current continuously exceeds the rated threshold, the thermal release device inside the circuit breaker

triggers a trip to prevent the line from overheating and damage.

In response to large currents generated by sudden short-circuiting of the line, the circuit will be cut off instantaneously through the

electromagnetic release mechanism to avoid equipment damage or fire, It's also suitable for AC power.



### Features

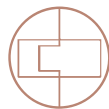
- Reliable protection at high ambient temperatures.
- Over load Protection.
- Tested: Ultimate short circuit breaking capacity Icu of 20kA according to IEC IEC60947-2.
- Fast: effectively prevent arc faults and melting.
- Safe: fast and accurate circuit interruption, short circuit protection, and adjustment functions, with good circuit interruption and short circuit performance
- Strong Arc extinguishing.
- Non-polarity
- Standards: IEC/EN 60947-2
- Quality Certificates: CE ISO 9001 RoHS



SHORT CIRCUIT PROTECTION



NON POLARIZED



THERMAL PROTECTION



ELECTROMAGNETIC PROTECTION



UNDERLOAD DISCONNECTING

### Application

- Suitable for all DC applications such as PV systems, communications, Distribution and DC Storage systems (Batteries)

# DC MCCB (Breaker non-polarity & Circuit protection)

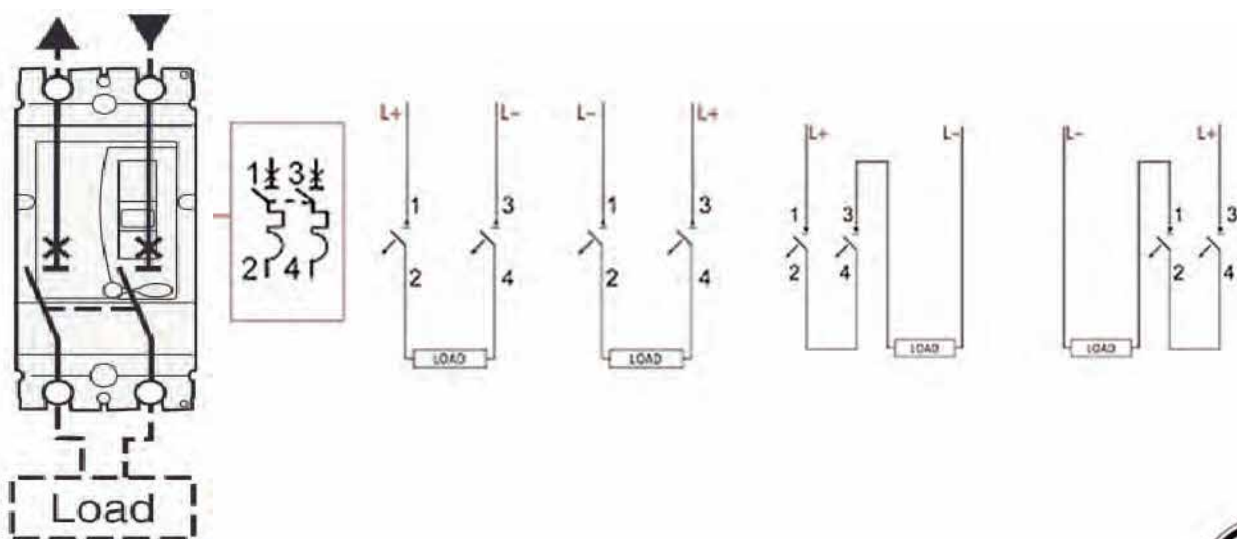
## ELMDC

### Technical data

Pole	2P	4P
Rated voltage Ue (DC VI)	500 VDC	1000VDC
Rated Insulation Voltage Ui (V)	1000 V	
Rated Current In (A)	125/160/200/250 A	
Frame Degree Rated Current (A)	125/250	
Rated Frequency (Hz) when using AC power source	50/60 HZ	
Rated Impulse Withstand Voltage Uimp (KV)	8 KV	
Breaking capacity Icu (kA)	20	
Operating Breaking capacity Ics (kA)	15	
Trip Type:	Thermal-magnetic	
Mechanical Life (times)	20000	
Electrical Life (times)	3000	
Housing Material	Bakelite	
Conductor Material	Copper	
Operating Temperature	-35°C to+ 70°C	
Humidity	<95%	
Altitude	<2000m	
Installation	Fixed, plug	
Product Size L*W*H mm	165*75*108	165*141*108

### Connection and wiring diagram

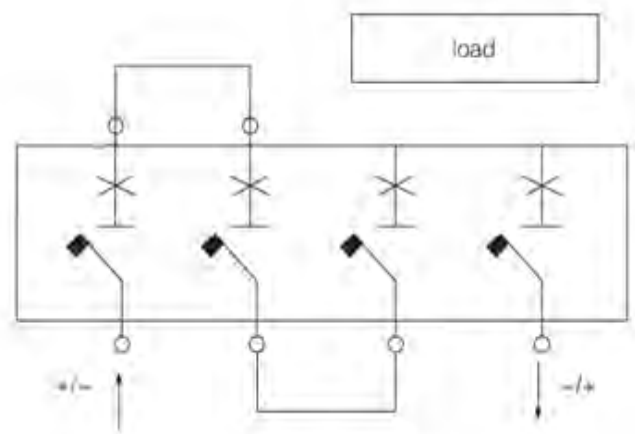
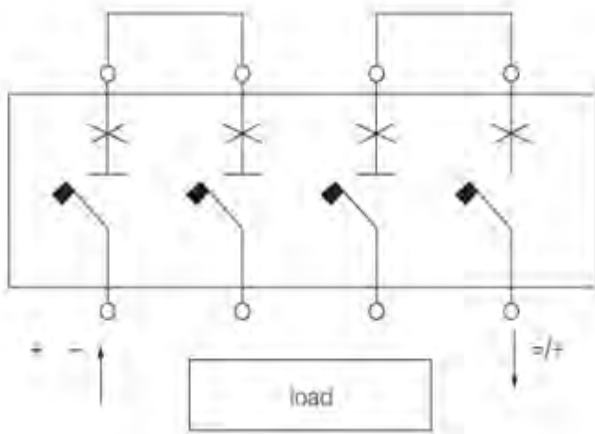
2P



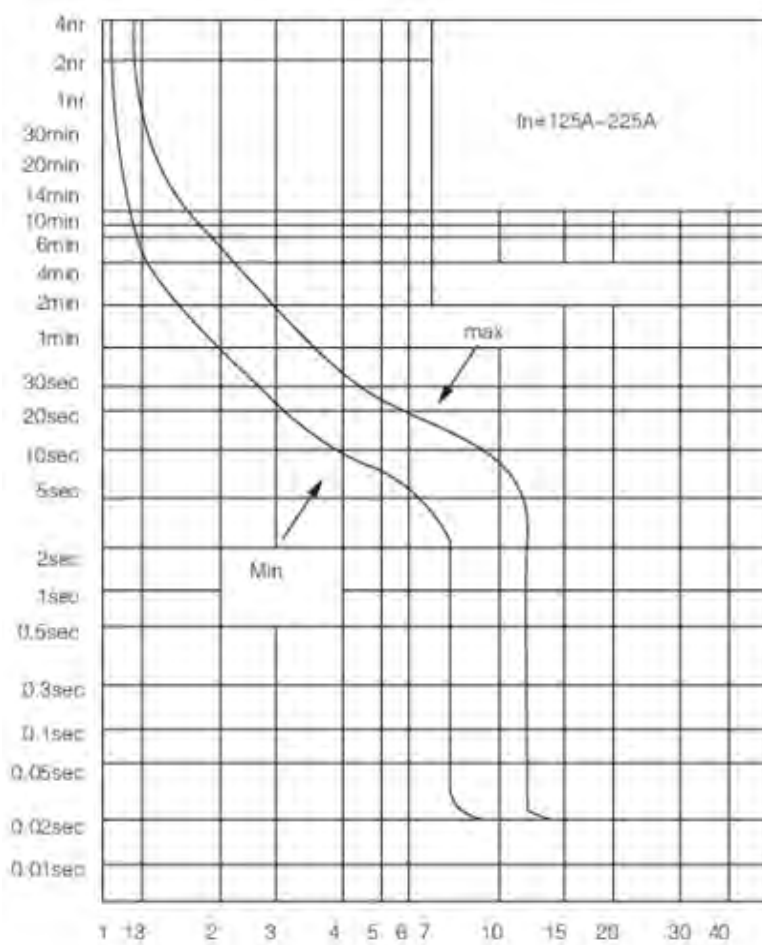
# DC MCCB (Breaker non-polarity & Circuit protection)

## ELMDC

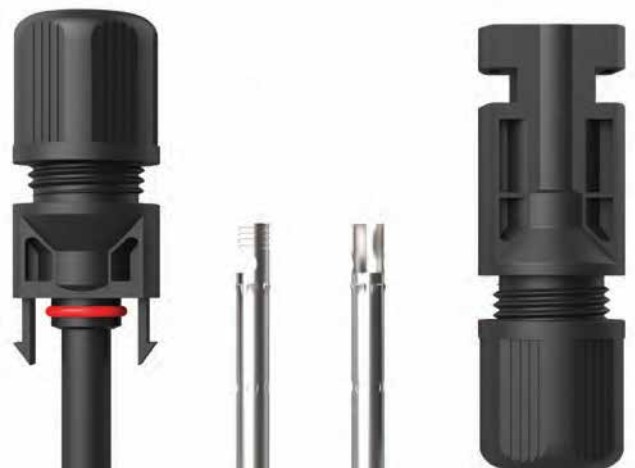
### 4P



### Tripping curve



# EVOLEC



**MC4 - ELMC4-1**

# MC4 Connector

## ELMC4-1 6mm

### General

Mainly used for the connection of solar panels and inverters. With a withstand voltage of up to DC1000V and using the new standard photovoltaic connector.



### Functions

- Makes photovoltaic power generation safer.
- Quick connection of photovoltaic cables and easy to install.
- Extremely low contact resistance.
- Waterproof and dustproof design.
- Excellent resistance to high and low temperatures, freeze, and UV radiation.

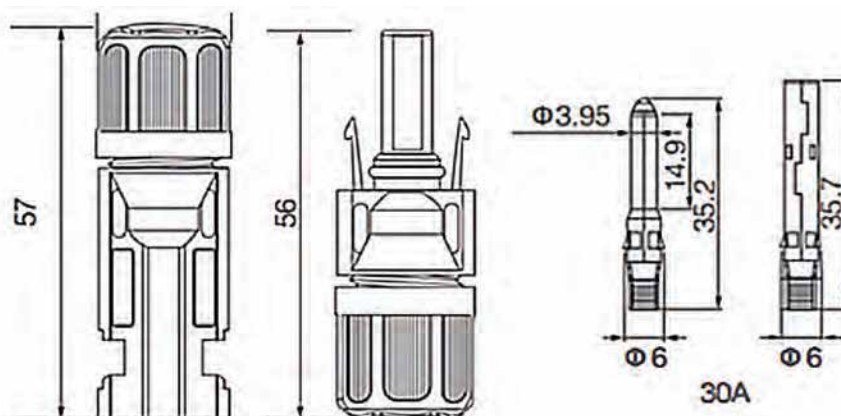
### Application

- PV Solar Systems

### Technical data

Parameter	Data
Connector System:	6 mm.
Rated Voltage (V):	1000V DC
Rated Current (A):	30 A
Ambient Temperature Range:	-40°C +90° C(IEC) -40°C +75° C(UL)
Upper limiting Temperature:	+105°C (IEC)
Degree Of Protection, Mated:	IP67
Unmated:	IP2X
Contact Resistance of Plug Connectors:	0.5mΩ
Safety class:	II
Contact Material:	Messing, Copper Alloy, tin plated
Insulation Material:	PC/PPO
Locking System:	Snap-in
Flame Class:	UL-94-VO
Salt mist spray test, degree of severity 5:	IEC60068-2-52

### Dimensional Drawing(mm)



# MC4 Connector

## ELMC4-1 10mm

### General

Mainly used for the connection of solar panels and inverters. With a withstand voltage of up to DC1500V and using the new standard photovoltaic connector.



### Functions

- Makes photovoltaic power generation safer.
- Quick connection of photovoltaic cables and easy to install.
- Extremely low contact resistance.
- Waterproof and dustproof design.
- Excellent resistance to high and low temperatures, freeze, and UV radiation.

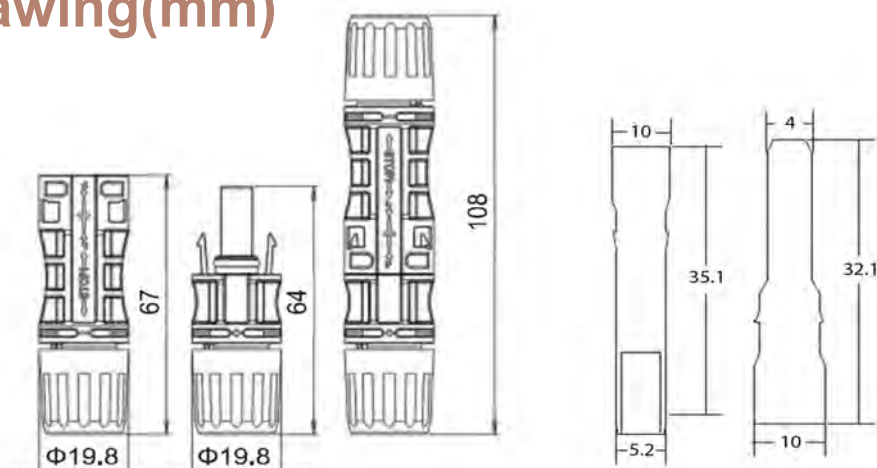
### Application

- PV Solar Systems

### Technical data

Parameter	Data
Connector System:	10 mm.
Rated Voltage (V):	1500V DC
Rated Current (A):	60 A
Ambient Temperature Range:	-40°C +90° C(IEC) -40°C +75° C(UL)
Test Voltage:	6KV(50Hz,1Min)
Degree Of Protection, Mated:	IP67
Unmated:	IP2X
Contact Resistance of Plug Connectors:	<1mΩ
Safety class:	II
Contact Material:	Messing, Copper Alloy, tin plated
Insulation Material:	PC/PPO
Locking System:	Snap-in
Flame Class:	UL-94-VO
Certificate:	TUV,CE,ROHS,ISO 9001

### Dimensional Drawing(mm)





**MC4 - ELMC4-F**

# MC4-F Connector

## ELMC4-F

### General

The MC4 fuse holder is an in-line, waterproof connector designed for photovoltaic (PV) solar systems to provide overcurrent protection for solar panels and other components. It integrates a safety fuse into a standard MC4 connector format, allowing for simple "plug-and-play" installation in solar wiring.



### Functions

- Makes photovoltaic power generation safer.
- Quick connection of photovoltaic cables and easy to install.
- Extremely low contact resistance.
- Waterproof and dustproof design.
- Excellent resistance to high and low temperatures, freeze, and UV radiation.

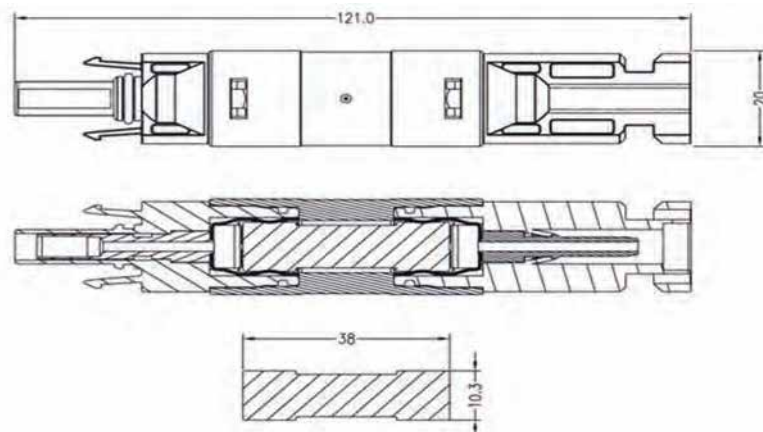
### Application

- PV Solar Systems

### Technical data

Parameter	Data
Connector System:	6mm.
Rated Voltage (V):	1500V DC
Rated Current (A):	30A
Ambient Temperature Range:	-40°C +90° C(IEC) -40°C +75° C(UL)
Upper limiting Temperature:	+105°C (IEC)
Degree Of Protection, Mated / Unmated:	IP67 / IP2X
Diode/Fuse type	Schottky diode/PV fuse
Contact Resistance of Plug Connectors:	0.5mΩ
Safety class:	II
Contact Material:	Messing, Copper Alloy, tin plated
Insulation Material:	PC/PPO
Locking System:	Snap-in
Flame Class:	UL94-HB/UL94-V0
Salt mist spray test, degree of severity 5:	IEC60068-2-52

### Dimensional Drawing(mm)



# EVOLEC



DIN RAIL INDICATOR LIGHT - ELLI

# Din Rail Indicator light ELLI

## ELLI

### General

ELLI Series features and modern design led pilot light for advance light diffusion in several colors for easy application in different environments.

### Operation conditions

Ambient temperature is -5C to +40C,  
 the average temperature during 24 hours couldn't exceed +35C.  
 Attitude: ≤2000 meter  
 Pollution degree: 3

### Applications



ELLI	
Industrial applications	Safety and Outdoor Applications
Home applications	
Instrument Control Panels	
Transportation Dashboards	
Solar systems	

### Technical data

ELLI-1	ELLI-2	ELLI-3
Rated voltage:	220VAC/24VAC	
Rated Current:	≤20 mA	
Service life:	≥30,000 hours	
Brightness:	≥40 (cd/m <sup>2</sup> )	
Weight:	37 g	42 g
Basic colors:	RED-Green-Blue-Yellow	RED + Green
		RED + Green + Yellow

### Overall and dimensions





**PANEL BULB - ELLI-22**

# Indicator light ELLI And buzzer indicator

## ELLI-22

### General

ELLI Series features and modern design led pilot light for advance light diffusion in several colors for easy application in different environments.

### Operation conditions

Ambient temperature is -5C to +40C,  
 the average temperature during 24 hours couldn't exceed +35C.  
 Attitude: ≤2000 meter  
 Pollution degree: 3



### Applications

ELLI	ELLIB-15s 220V
Industrial Machinery	Home applications
Transportation Dashboards	Industrial applications
Instrument Control Panels	Alarm applications
Maritime, Oil and Gas Industry	Solar systems
Safety and Outdoor Applications	

### Technical data

ELLI	ELLIB-15s 220V
Rated voltage: 220VAC/24VAC	Rated voltage: 220VAC
Rated Current: ≤20 mA	Buzzer for 15 sec
Service life: ≥30,000 hours	Weight: 20g
Brightness: ≥40 (cd/m <sup>2</sup> )	Basic colors: RED
Weight: 16g	
Basic colors: RED-Green-Blue-Yellow-White	

### Overall and dimensions

ELLI	ELLIB-15s 220V

# EVOLEC



RELIABLE  
PROTECTION



NON  
POLARIZED



COMPLETE  
ISOLATION



DC ISOLATOR 32A 4P 1200VDC  
ELIDC-4P 32A

# DC Isolation Switch

## ELIDC-4P 32A

### General

Ensure complete isolation of personnel from live parts during repair and maintenance to the risk of electric shock. Reliable protection for your solar power systems.



### Functions

- Reliable protection.
- Complete isolation.
- Switching circuit
- Fully isolated circuit
- Non-Polarized.



### Application

- Solar System
- Distributing system
- Communications systems and data centers

### Technical data

Parameter	Data
Rated Current In(a):	32A
Rated Working Voltage Ue (V):	1200VDC
Rated Insulation Voltage Ui (V):	1500VDC
Pole:	4P
Rated Impulse Withstand Voltage Uimp (kV):	8
Wiring Method:	Non-polarized
Insulation Feature:	Yes
Flame Retardant Grade:	UL94V-O
Housing Material:	PA
Conductor Material:	Silver Plated Copper
Mechanical Life (times):	20000
Electrical Life (times):	6000
Operating Temperature:	-40°C to +85°C
Humidity:	≤95%
Altitude:	2000m
Installation:	35mm DIN Rail
Standard:	IEC/EN60947-3 GB/T 14048.3



Automatic Fire Extinguisher



Safe On Electricals



Thermal Activated



# Aerosol Fire Extinguishing Device ELAFE

# Aerosol Fire Extinguishing Device

## ELAFE

### General

Aerosol fire extinguishing devices are compact, automatic solutions for enclosed electrical spaces like cabinets, offering fast, residue-free fire suppression by releasing a chemical aerosol that disrupts fire's chain reaction, activated by heat, requiring no water or complex plumbing, and



### Functions

- Automatic Activation
- Rapid Suppression
- Chemical Action
- Power-Independent
- Environmentally Friendly



### Application

- Solar System
- Industrial applications
- Home applications

### Technical data

Parameter	Data
Activation Mode:	Thermal
Spray release time:	≤6s
Extinguishing Density:	100g/m <sup>3</sup>
Line length:	11cm
Expiration Date:	10 years
Installation:	standard 35mm DIN rails
Housing:	High-temperature resistant plastic (ABS)
Operating Temp:	-50°C to +95°C
Standards	EN 15276, UL2775, ISO15779, GB499.1-2010.
Fire Class:	Class C
Discharge Distance:	1-3 meters



## DC FUSE HOLDER

ELFH-1038PV-2P

## DC FUSE HOLDER

### ELFH-1038PV With DC Fuse ELFL-1038PV

#### General

Fuses are core safety devices used for overcurrent protection in power systems Reliable Protection for Your Solar Power Systems.



#### Functions

- High quality materials
- LED Indicator.

#### Applications

- PV systems
- Dc Home applications
- Communication systems
- Data centers.

#### Technical data

Parameter	Data
Fuse Holder Rated current:	2~32 A
Fuse current:	2~32 A
Fuse size:	10 X 38 mm
Rated voltage:	1000 VDC
Holder Poles:	1P/2P
Standard:	IEC 60269
Housing Material:	PA
Operating Temperature:	-30°C to +70°C
Humidity:	≤95%
Altitude:	2000m

#### Operational condition

The upper limit of ambient air temperature shall not exceed 90°C; The lower limit of ambient air temperature shall not be less than -40 °C; The elevation of the installation site should not exceed 2000m (if it is to exceed this 2000m, the requirements need to be specified, and our company can design and develop according to customer requirements).

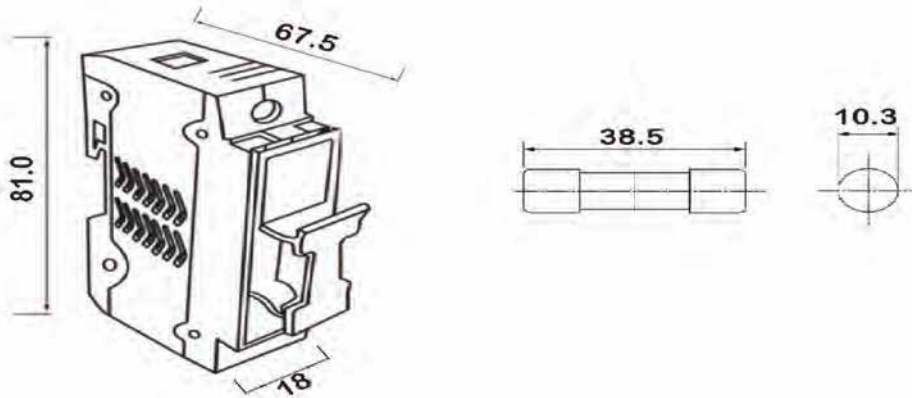
#### Structural characteristics

The variable cross-section melt made of pure silver sheets is encapsulated in a melt tube made of high-strength porcelain. The melt tube is filled with chemically treated high-purity quartz sand and specially treated chemical materials as the arc extinguishing medium. The two ends of the melt are firmly connected to the contact through spot welding.

# DC FUSE HOLDER

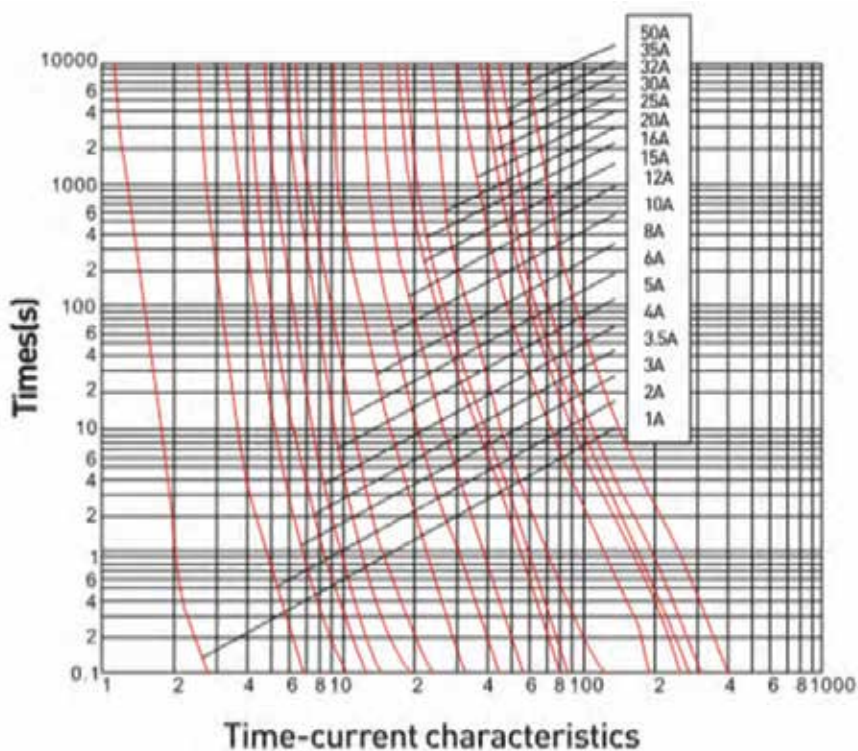
## ELFH-1038PV With DC Fuse ELFL-1038PV

### Dimensional Drawing(mm)



### Fuse Holder Test method

(gPV) Rated current A	Agreed time h	agreed current	
		Inf	If
$I_n \leq 63$	1	1.13I <sub>n</sub>	1.45I <sub>n</sub>
$63 < I_n \leq 160$	2		
$160 < I_n \leq 400$	3		
$I_n > 400$	4		



# EVOLEC



ISOLATION  
PROTECTION



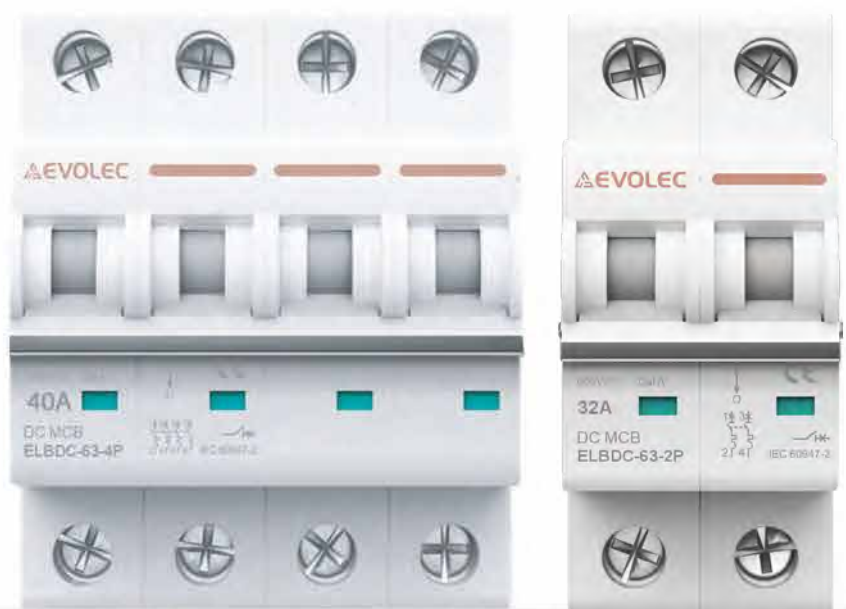
NON  
POLARIZED



SHORT CIRCUIT  
PROTECTION



OVER LOAD  
PROTECTION



DC MCB  
ELBDC-63

## DC MCB

### ELBDC

#### General

The rated operating voltage can reach DC1200V, and the rated operating current can reach 63A, which is used for isolation, overload, and short circuit protection. It is widely used in photovoltaic, industrial, civil, communication, and other systems, and can also be used in DC systems to ensure the reliable operation of DC systems.



#### Functions

- Modular design, small size.
- Non-Polarized.
- Standard Din rail installation, convenient installation.
- Overload, short circuit, isolation protection function, comprehensive protection.
- The breaking capacity reaches 6KA, with strong protection capacity.
- Complete accessories and strong expansibility.
- Multiple wiring methods to meet various wiring needs of Customers.

#### Applications

- PV systems.
- Communication systems.
- All DC applications.

#### Technical data

Parameter	Data
Pole:	2P/4P
Frame grade:	63
Rated working voltage VDC:	2P 600VDC/ 4P 1200VDC
Rated current In(A):	1,2,3,4,6,10,16,20,25,32,40,50,63
Rated insulation voltage Ui (V DC):	1200
Rated impulse voltage Uimp (KV):	4
Ultimate breaking capacity Icu (KA) (T =4ms):	6
Operation breaking capacity Ics (KA):	Ics=100%Icu
Tripping type:	Thermal-magnetic
Curve Type:	C
Mechanical life:	20000 times.
Electrical life:	2500 times.
Polarity:	Heteropolar
Working temperature:	-20 C to +70 C
Altitude(m):	2000m
Pollution degree:	Level 3
Protection degree:	IP20
Installation environment:	Places without significant vibration and impact
Installation method:	DIN35 standard rail
Wiring capacity:	2.5-25mm <sup>2</sup>
Terminal torque:	3.5 N·m
Product size(mm) :	2P:75.5*36*80 4P:75.5*72*80
Standard:	IEC/EN 60947-2, EU ROHS environmental protection requirements.
Quality Certificates:	CE, ISO 9001, RoHS

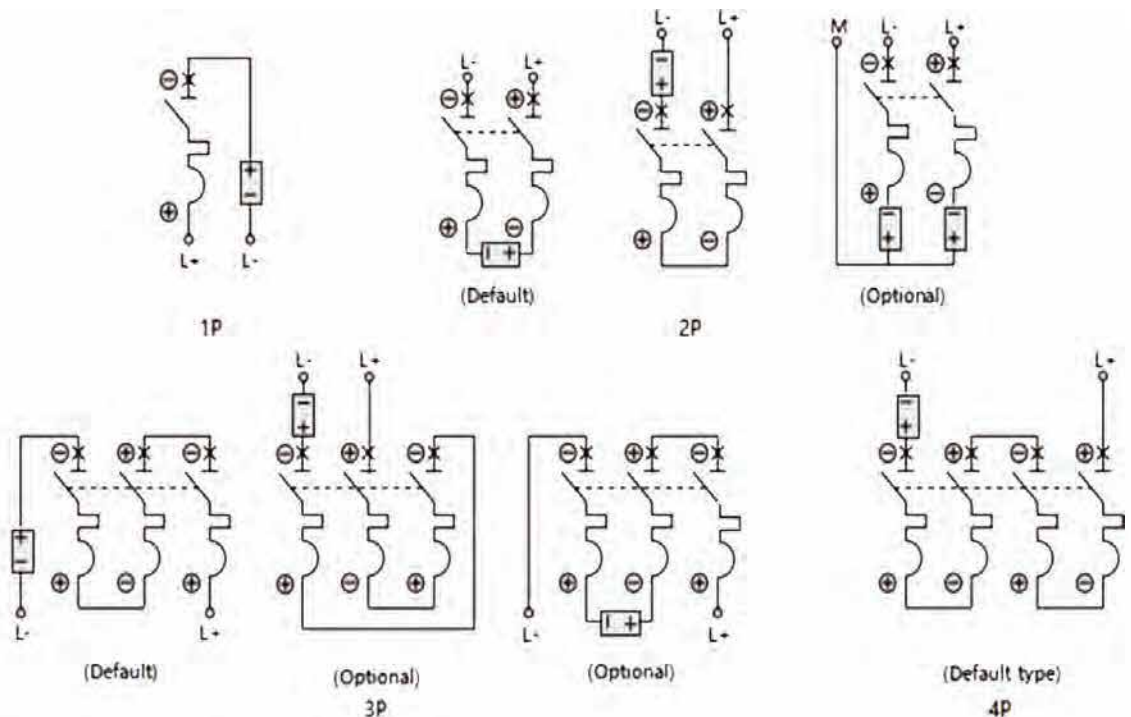
# DC MCB

## ELBDC

### Grounding and fault effect

Grounding type	Single-stage grounding system	Ungrounded system		
Circuit diagram				
Fault effect	Fault A	Maximum short-circuit current $I_{sc}$	Fault A	No effect
	Fault B	Maximum short-circuit current $I_{sc}$	Fault B	Maximum short-circuit current $I_{sc}$
	Fault C	No effect	Fault C	No effect

### Wiring diagram



Note:

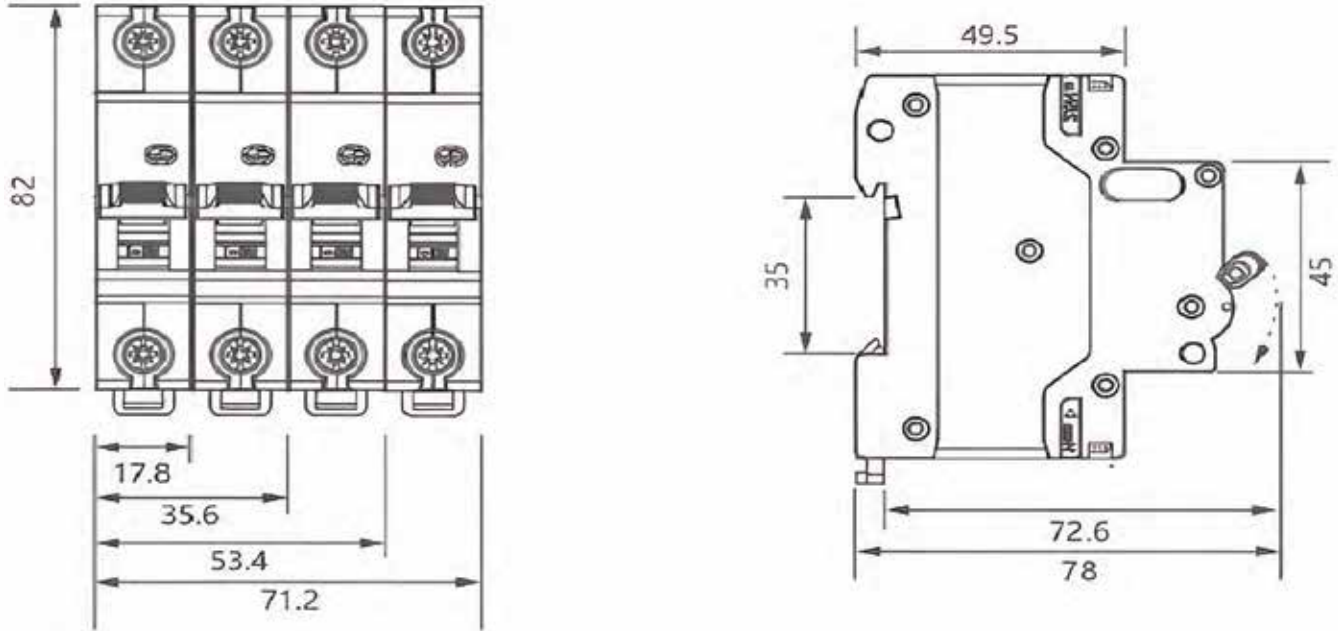
L+ power supply positive pole    ⊕ Positive pole of circuit breaker  
 L- power cathode                    ⊖ Negative pole of circuit breaker

Please place a note for other wiring methods while placing an order.

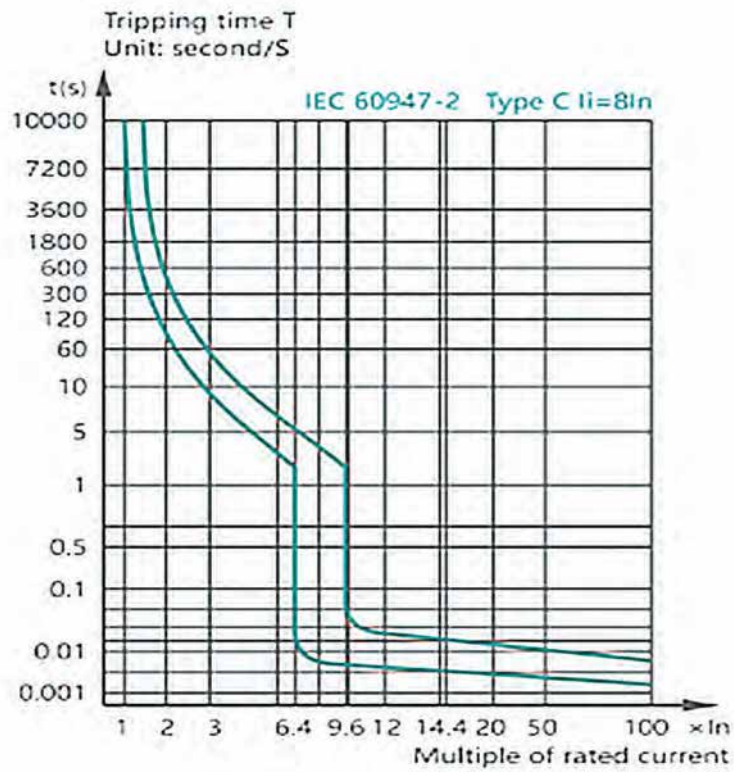
# DC MCB

## ELBDC

### Overall and mounting dimensions(mm)



### Curve



C curve  $8I_n \pm 20\%$ ,  
applicable rated current  $\leq 63A$

## DC MCB

### ELBDC

## Temperature correction factor table

Current correction value(A) Rated current(A)	Environmental temperature (°C)	-35	-30	-20	-10	0	10	20	30	40	50	60	70
	1	1.3	1.26	1.23	1.19	1.15	1.11	1.05	1	0.96	0.93	0.88	0.83
2	2.6	2.52	2.46	2.38	2.28	2.2	2.08	2	1.92	1.86	1.76	1.66	
3	3.9	3.78	3.69	3.57	3.42	3.3	3.12	3	2.88	2.79	2.64	2.49	
4	5.2	5.04	4.92	4.76	4.56	4.4	4.16	4	3.84	3.76	3.52	3.32	
6	7.8	7.56	7.38	7.14	6.84	6.6	6.24	6	5.76	5.64	5.28	4.98	
10	13.2	12.7	12.5	12	11.5	11.1	10.6	10	9.6	9.3	8.9	8.4	
13	17.16	16.51	16.25	15.6	14.95	14.43	13.78	13	12.48	12.09	11.57	10.92	
16	21.12	20.48	20	19.2	18.4	17.76	16.96	16	15.36	14.88	14.24	13.44	
20	26.4	25.6	25	24	23	22.2	21.2	20	19.2	18.6	17.8	16.8	
25	33	32	31.25	30	28.75	27.75	26.5	25	24	23.25	22.25	21	
32	42.56	41.28	40	38.72	37.12	35.52	33.93	32	30.72	29.76	28.16	26.88	
40	53.2	51.2	50	48	46.4	44.8	42.4	40	38.4	37.2	35.6	33.6	
50	67	65.5	63	60.5	58	56	53	50	48	46.5	44	41.5	
63	83.79	81.9	80.01	76.86	73.71	70.56	66.78	63	60.48	58.9	55.44	52.29	

## Use of derating table at high altitude

Tripping type	Rated current(A)	Current correction factor			Example
		≤2000m	2000-3000m	≥3000m	
B, C, K	1, 2, 3, 4, 6, 10, 13, 16, 20, 25 32, 40, 50, 63	1	0.9	0.8	The rated current of 10A products is 0.9×10=9A after derating at 2500m

## Recommended wiring size

Rated current In(A)	Nominal cross-sectional area of copper conductor(mm <sup>2</sup> )
1~6	1
10	1.5
13, 16, 20	2.5
25	4
32	6
40, 50	10
63	16

## Power consumption per pole of circuit breaker

Rated current In(A)	Maximum power consumption per stage(W)
1~10	2
13~32	3.5
40~63	5

# EVOLEC



ISOLATION  
PROTECTION



NON  
POLARIZED



SHORT CIRCUIT  
PROTECTION



OVER LOAD  
PROTECTION



DC MCB  
ELBDC-125

## DC MCB

### ELBDC-125

#### General

The rated operating voltage can reach DC1200V, and the rated operating current can reach 125A, which is used for isolation, overload, and short circuit protection. It is widely used in photovoltaic, industrial, civil, communication, and other systems, and can also be used in DC systems to ensure the reliable operation of DC systems.



#### Functions

- Modular design.
- Non-Polarized.
- Standard Din rail installation, convenient installation.
- Overload, short circuit, isolation protection function, comprehensive protection.
- The breaking capacity reaches 6KA, with strong protection capacity.
- Complete accessories and strong expansibility.
- Multiple wiring methods to meet various wiring needs of Customers.

#### Applications

- PV systems.
- Communication systems.
- All DC applications.

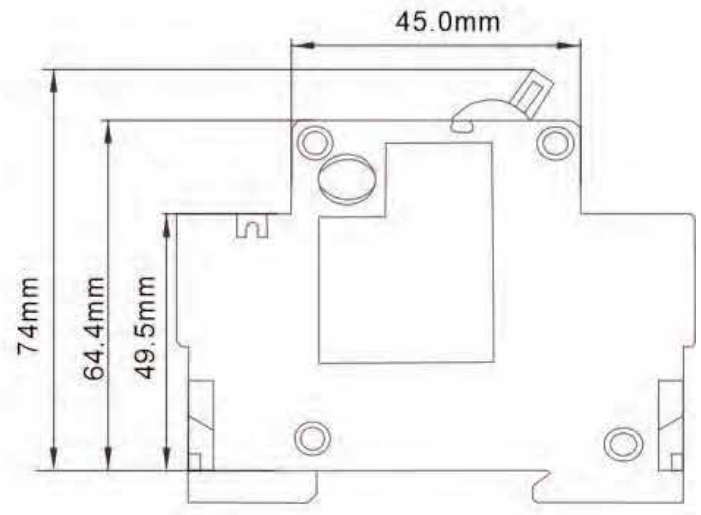
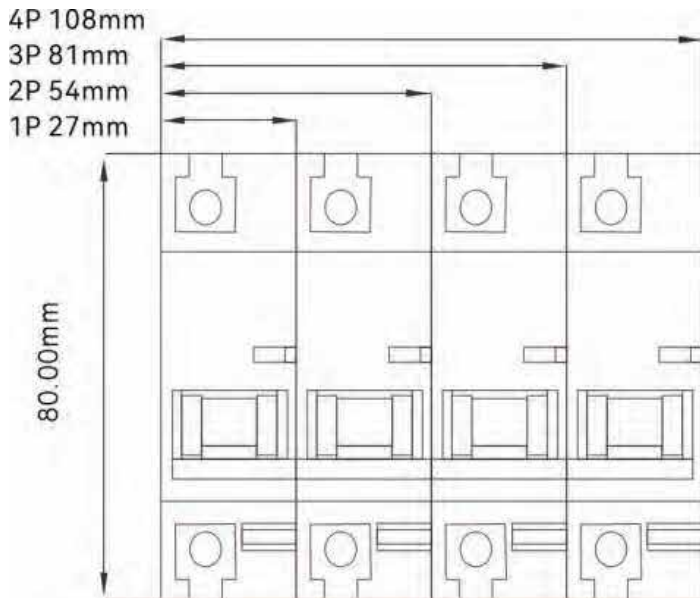
#### Technical data

Parameter	Data
Pole:	2P/4P
Frame grade:	125
Rated working voltage VDC:	2P 600VDC/ 4P 1200VDC
Rated current In(A):	80,100,125
Rated insulation voltage Ui (V DC):	1200
Rated impulse voltage Uimp (KV):	4
Ultimate breaking capacity Icu (KA) (T =4ms):	6
Operation breaking capacity Ics (KA):	Ics=100%Icu
Tripping type:	Thermal-magnetic
Curve Type:	C
Mechanical life:	10000 times.
Electrical life:	2500 times.
Polarity:	Heteropolar
Working temperature:	-20 C to +70 C
Altitude(m):	2000m
Pollution degree:	Level 3
Protection degree:	IP20
Installation environment:	Places without significant vibration and impact
Installation method:	DIN35 standard rail
Wiring capacity:	16-50 mm <sup>2</sup>
Terminal torque:	3.5 N·m
Product size(mm) :	2P:74*54*80 4P:74*108*80
Standard:	IEC/EN 60947-2, EU ROHS environmental protection requirements.
Quality Certificates:	CE, ISO 9001, RoHS

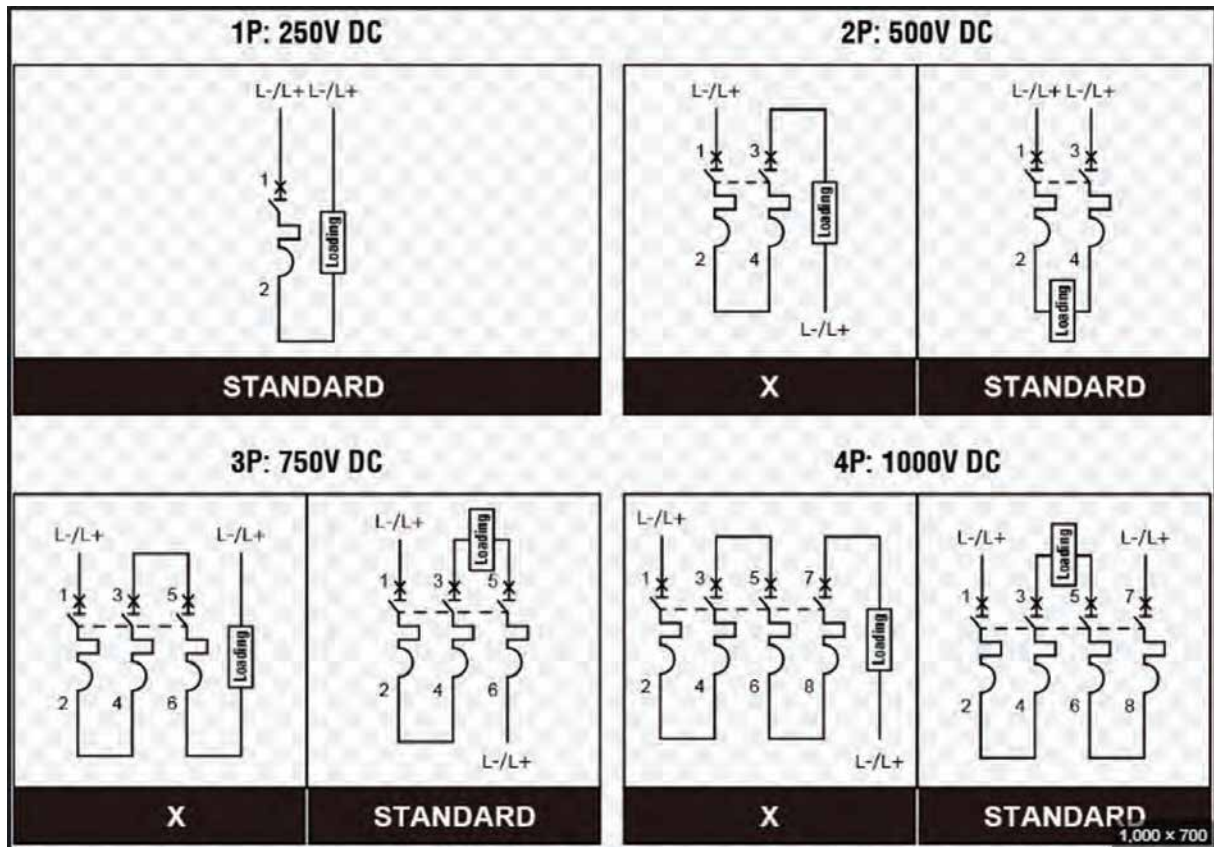
# DC MCB

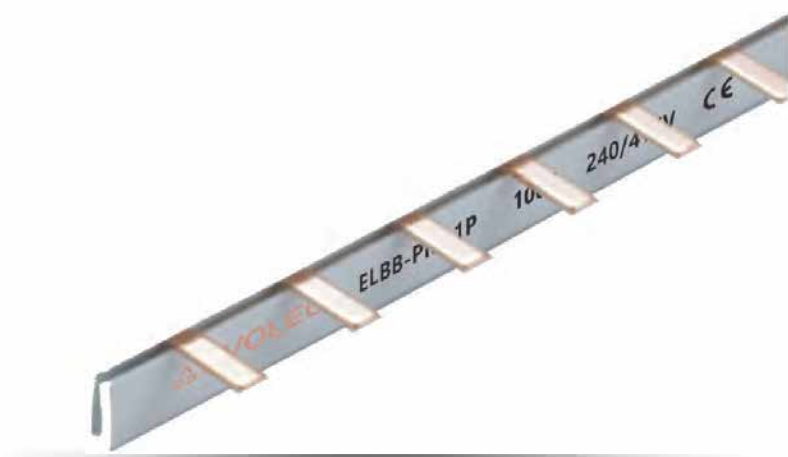
## ELBDC-125

### Overall and mounting dimensions(mm)



### Wiring diagram





**COMB BUSBAR  
ELBB-PIN-1P**

# Comb Busbar

## ELBB-PIN 100A

### General

ELBB-PIN comb busbars meet the global certification and are also applicable to miniature circuit breakers meeting the global standard. The maximum rated current can reach 100A, and can be cut to the required length separately.



### Features

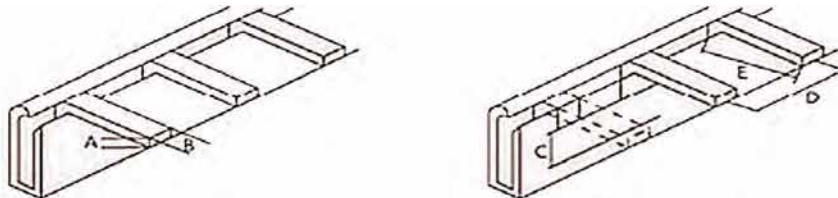
- 1P/3P options
- Good conductivity
- Convenient installation to enhance the efficiency of customer use.
- low contact resistance
- Flexible cutting to meet individual customer needs.
- Safe and reliable performance comb busbar.

### Applications

- Industrial panels
- Home panels

### Applications

#### PIN 1P



Specification	Model	A	B	C	D	E	Reference current
PIN	1P	1.5	4	9	17.8	11.5	80A
PIN	1P	1.8	4	9	17.8	11.5	100A

#### PIN 3P



Specification	Model	A	B	C	D	E	Reference current
PIN	3P	1.5	4	9	17.8	11.5	80A
PIN	3P	1.8	4	9	17.8	11.5	100A

# EVOLEC



## Modular AC Contactor - ELMC

# Modular Contactor

## ELMC

### General

ELMC series AC contactor are compact, DIN rail-mountable electrical switches for controlling medium-to-large loads (like lighting, HVAC) in homes and buildings, offering silent, energy-efficient, and easy-to-install automation by remotely making/breaking power circuits, differing from industrial contactors by their size and noiseless operation in residential panels.



### Features

- Compact & DIN Rail Mountable
- Low Noise
- Energy Efficient
- Versatile
- Automated Control

### Technical data

Parameter		Data			
		25/20	25/11	25/22	63/22
Rating AC Current	AC-7a	25A	25A	25A	63A
	AC-7b	8.5A	8.5A	8.5A	20A
Width		18mm	18mm	36mm	54mm
Control voltage		230V	230V	230V	230V
Rated Frequency		50/60Hz	50/60Hz	50/60Hz	50/60Hz
Contact		2NO	1NO+1NC	2NO+2NC	2NO+2NC

### Overall and Dimention (mm)

