



## General

Series SPGL low voltage capacitors in cylindrical aluminum case were designed to compensate the reactive energy power line loss as well as harmonic filter in power networks up to 1000V. With three capacitor elements internally wired in a delta or star connection, SPGL series capacitor is intended to increase packing density per bank and cut component costs. Improved thermal response and simplified installation are advantages of the cylindrical aluminum case capacitor.

## Application

- Automatic power factor correction (PFC) and capacitor banks
- Individual solution for fixed power factor correction (e.g. Motor, power transformers, lighting etc.)
- Group fixed power factor correction (several equipment connected in a group)
- Capacitor banks of tuned and detuned
- Harmonic trap applications (e.g. UPS, frequency drives and converters etc.)
- Special application such as outdoor mounting, wind power etc.

## Benefit

### Electrical

- Highest pulse current with-stand capability
- Corona-free
- Very low losses
- Internal discharge resistor
- Terminal for high capacity cables (up to 32mm<sup>2</sup>), both side of the terminal can be used

### Environment

- No pollution & PCB free
- Friendly manufacture
- Recyclable
- Save energy and reduce carbon dioxide emission

### Mounting

- Compact volume
- Low weight & height
- Maintenance-free
- Reduce mounting costs
- Any position mounting is available on request

### Safety

- Dry type design
- Self-healing
- Over-pressure and over-current tear off
- Non-flammable
- Touch-proof terminals
- Three cascade cylinder sealing & one form capacitor case, no possibility for leaks

### Additional function

- Pole mounting
- Element of square Cap. of SPGL Box capacitors
- SPGL Fixed capacitors

### Innovative design

- Multi-Protection capacitor
- 3P/4Line capacitor

## Specification of order series

### SPGL440-3-30

- SPGL capacitor
- Rate voltage: 440V
- Phase: three
- Rate power: 30kvar

### SPGLw440-3-25

- SPGLw outdoor/pole mounting capacitor
- Rate voltage: 440V
- Phase: three
- Rate power: 25kvar

### SPGL230-3/4-15

- SPGL 3phase 4wire capacitor
- Phase: delta or star
- Rate power: 15Kvar

### SPGL230-1-10

- SPGL single phase capacitor
- Rate voltage: 230V
- Phase: single
- Rate power: 10kvar

### SPGLd440-3-20

- SPGLd Multi-Protection capacitor
- Rate voltage: 440V
- Phase: three
- Rate power: 20kvar

### SPGLCLMd440-3-100

- SPGL square capacitor
- Phase: three
- Rate power: 100Kvar

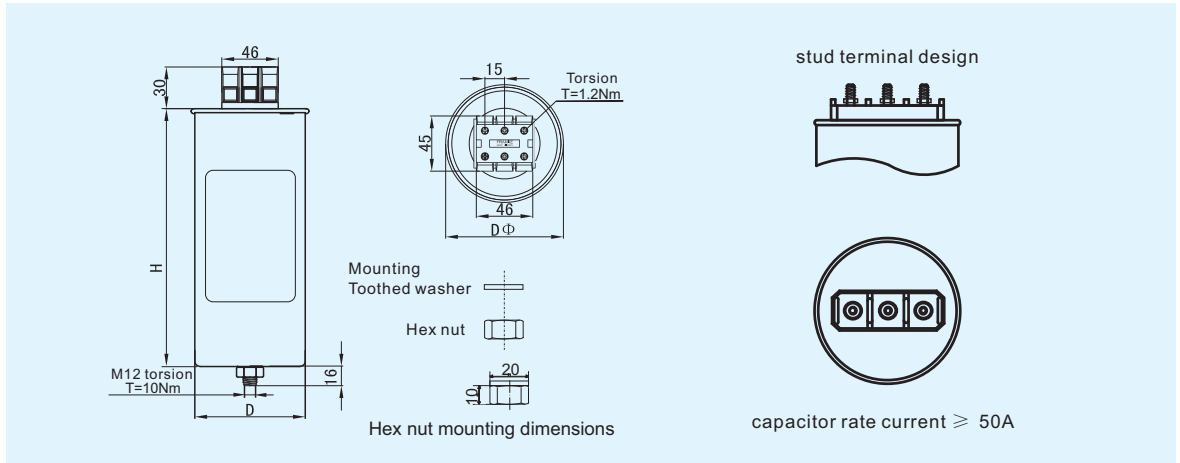
## Specification

Over Voltage	U	Un+10%(up to 8h daily)/Un+15%(up to 30 min daily).Un+30%(up to 1 min)
Over Current	I <sub>max</sub>	Min.1.3In(in certain cases higher)
Inrush Current	I <sub>s</sub>	200 times rated current(other request is available)
Losses (Dielectric)		≤0.20W/kvar
Capacitance Tolerance	C <sub>n</sub>	-5%+5%
Test Voltage Terminal to Terminal	U <sub>TT</sub>	2.15Un, AC, 10s
Test Voltage Terminal to Case	U <sub>TC</sub>	Up to Un≤660V:3000VAC, 10s;above Un>660V: 6000VAC, 10s
Life Expectancy	TLD <sub>(CO)</sub>	100,000 to 150,000 operating hours
Ambient Temperature Category	L <sub>CT</sub> /U <sub>CT</sub>	-25/D, Max. 55°C, with forced cooling conditions higher ambient temperature on request
Cooling		Naturally air-cooled (of forced air cooling)
Permissible Max Humidity	H <sub>rel</sub>	95%
Maximum Permissible Altitude		Normal 1000 m above sea level (Max.3000m)
Mounting Position		Normal stand mounting,any position mounting is available on request.
Mounting and Grounding		Threaded M12 (or M16) stud on bottom of case
Safety Features		Dry technology, overpressure/current disconnecter, self-healing
Discharge Resistors		Internal discharge module design included in delivery, (<75V within 3 min)
Case		Extruded aluminium can without any impress
Degree of Protection		IP20, indoor mounting
Outdoor using		With the plastic cover,IP55,the capacitors diameters ranges are 96mm to 116mm
Impregnation		Non-PCB, special protection gas with resin.
Terminals		Dual, with electric shock protection, max, cross-section 32 mm <sup>2</sup> cable
Installation		Indoor and outdoor (with the cover)
Standards		IEC60831-1(2), EN60831-1(2), VDE0560-46(47), CE.(UL marking on request)

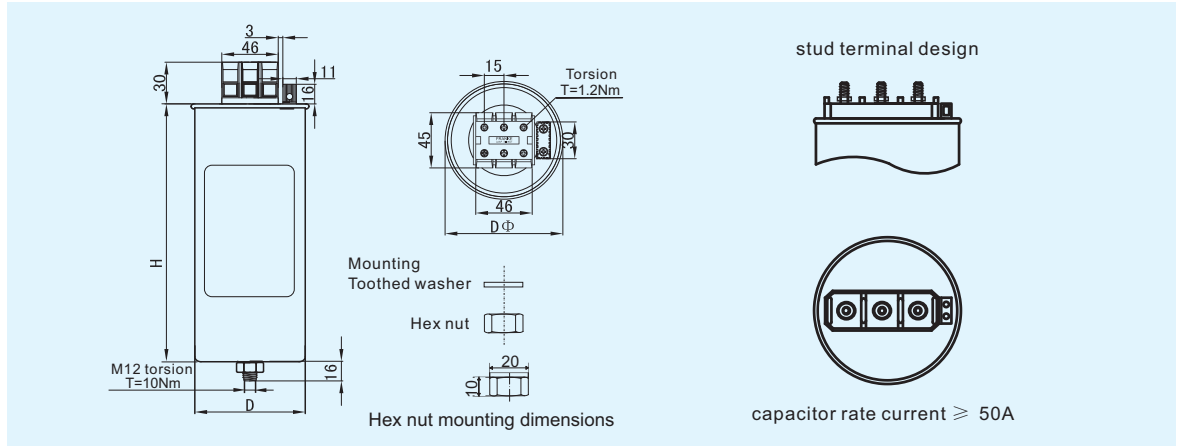
## Outdoor/Pole mounting

Mounting		With the plastic protective cover for terminal
Protection class		IP55
Ambient Temperature category	L <sub>CT</sub> /U <sub>CT</sub>	Normal 50°C,Max.60°C
Connection cable		Standard 0.5M & 1M
Mounting plant		Are available on request

## Mounting draw SPGL series capacitor



## Mounting draw SPGLd Mult-Protection capacitor



### Outdoor/Pole mounting:

Outdoor/pole mounting is available by the plastic protective caps to protect the capacitor terminals from accidental contact or the influence of dust and water. In general, protective caps for design capacitors with diameters 96mm to 116mm are fixed to the capacitors. In that case, cable and internal discharge device are also fitted (0.5m or 1m) to give an IP55 rating. Order No: SPGLw

for the capacitor diameter	standard cable length	series No.
$\Phi 96$	0.5m or 1m	SPGLw
$\Phi 116$	0.5m or 1m	SPGLw

