

### 3.1 Power RC Snubber Networks : - STRC series

#### Applications :

Interference suppression; elimination of spark and transient phenomena in power switch and relay; arc suppressing for industrial heavy duty application; electrical automation control, starting, stopping, regulating or protecting electric motors  
Transient and  $dV/dt$  suppression for power Thyristor and Triacs in snubber circuit  
Fan Speed Regulator and Motor Speed Regulator  
Suitable for AC and DC voltage application

#### Constructions :

Supporting different Capacitor Configuration, electrical connections and mounting options so as to increase your design flexibility

#### Mounting systems :

Cylindrical Plastic Case : with Stud - M8 or without Stud (see P.30)

Box Plastic Case: Screw mounting hole / without Screw mounting hole(see p.33)

#### Electrical Characteristics :

**Capacitance value** : 0.1 - 2.0 $\mu$ F

**Voltage** : 125Vac, 220Vac, 240Vac, 480Vac, 600Vac

**Resistance and rate power of the Resistor** : customer design, 1/4W - 50W

**Temperature range** : -25C - +85C / -40C - +105C

**Testing Voltage** : : 1.5 x  $U_n$  10sec (can be customized design)

Varistor options is available

#### Circuits :

connection for Resistor and Capacitor : series, parallel or three phase



The combination of Capacitance value, Voltage, Resistor type, Resistance, Power Rating and Dimension, please contact us for a design suited to your particular needs.

## RC Snubber Networks :-class X2 250VAC / 600DC

### STRC-X2-series

Switch Contact protection  
 Interference suppression of contact  
 Transient Suppression  
 Long life even when subjected to high frequency and over voltage  
 Plastic Case & Epoxy Resin – Flame Retardant meet UL94-V0  
**Varistor** options is available

### Electrical Connection :

Flexible wire : UL #1015,105C, AWG#18, 20  
 Flexible wire with terminal : Ring, Y or Pin terminal with various size

### General Specifications :

**Capacitance range** : 0.1 – 1.0uF  
**Capacitance tolerance** : +/-5%(J) +/-10% (k)  
**Resistance range** : 22 to 680 ohm 0.5W / 1W (normal values E6 series)  
**Rated Voltage** : 250VAC / 600VDC (inclusive of the superimposed AC component peak value)  
**Temperature range** : -25C to +85C / -40C - +105C

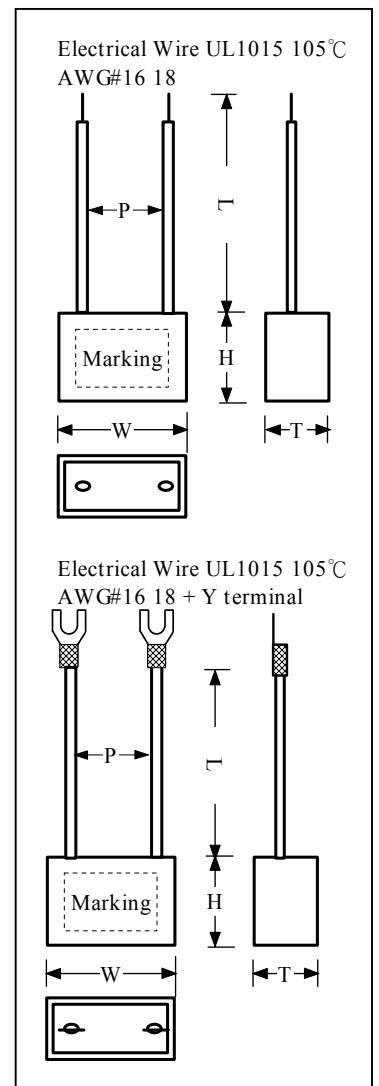
### Testing Voltage :

Terminal to Terminal : 2000VDC 2sec at 25±5C (can be customer design)  
 Terminal to Case : 2500Vac 2sec at 25±5C

**Insulation Resistance** : > 20000Mohm

**Reference Standard** : IEC60068-1 DIN40045 40/85/21

**Circuitry** : Resistor and Capacitor in series



### Dimensions :

Capacitance uF +/-10%	Resistance ohm +/-5%	Rated Power W	Rated Voltage		Width W mm	Height H mm	Thickness T mm	Pitch P mm	Lead length L mm
			Vac	Vdc					
0.1	22 – 680	1/2 - 1	250	600	26.5	19	10	21	150 or 300
0.22					32	22	13	26	
0.25									
0.47									
0.5					32	30	15	26	
1.0									

# RC Snubber Networks :- 480VAC / 1000DC

## STRC-480 series

- Switch Contact protection
- Interference suppression of contact
- Transient Suppression
- Long life even when subjected to high frequency and over voltage
- Plastic Case & Epoxy Resin – Flame Retardant meet UL94-V0
- Varistor options is available

### Electrical Connection :

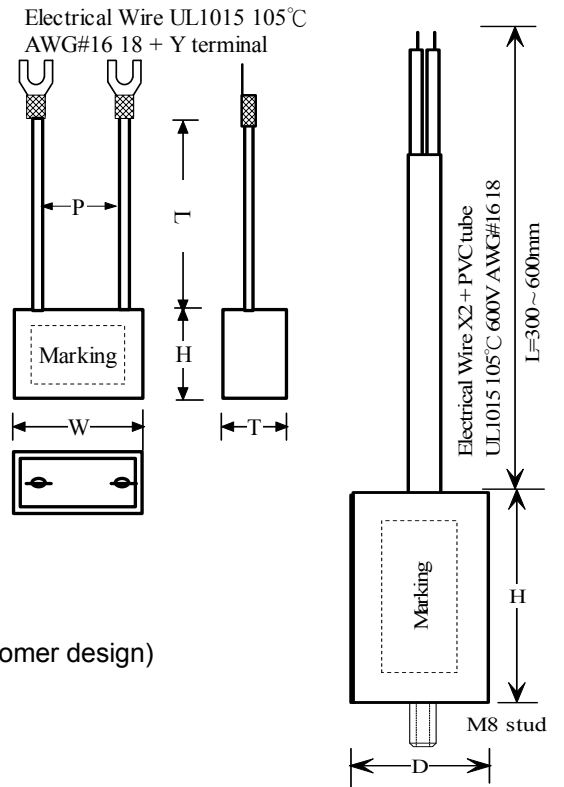
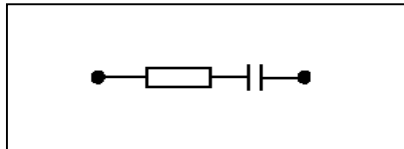
- Flexible wire : UL #1015, 105°C, AWG#18, 20
- Flexible wire with terminal : Ring, Y or Pin terminal with various size

### Mounting : M8 stud – Cylindrical type only

### General Specifications :

- Capacitance range** : 0.1 – 0.5uF
- Capacitance tolerance** : +/-5%(J) +/-10% (k)
- Resistance range** : 22 to 1kohm 1-10W other valve is available
- Rated Voltage** : 480VAC / 1000VDC (inclusive of the superimposed AC component peak value)
- Temperature range** : -40C - +85C / -40C - +105C
- Testing Voltage** : T to T : 1.75 x U<sub>n</sub> 10sec at 25±5C (can be customer design)  
T to Case : 2000Vac 10sec at 25±5C
- Insulation Resistance** : >10,000Mohm at 250VDC 2min. 23C
- Reference Standard** : IEC60068-1

### Circuitry :



### Box – type :

uF +/-5%	Rated Voltage		Resistance ohm ±10%	Rated Power W	Box			Electrical Wire L=mm
	VAC	VDC			W	H	T	
0.1	480	1000	10	1	39	32	22	300 or 600
0.1	480	1000	22	2				
0.1	480	1000	47	2				
0.1	480	1000	47	1				
0.1	480	1000	100	2				
0.1	480	1000	100	3				
0.1	480	1000	220	1				

### Cylindrical – type :

uF +/-5%	VAC	VDC	ohm ±10%	W	D	H	L=mm
0.22	480	1000	10	5	45	73	300 or 600
0.25	480	1000	220	5			
0.25	480	1000	50	10			
0.25	480	1000	68	10			
0.25	480	1000	100	10			
0.3	480	1000	100	10			
0.47	480	1000	220	5			
0.47	480	1000	820	10			
0.5	480	1000	15	5			
0.5	480	1000	220	5			
0.5	480	1000	10	10			
0.5	480	1000	75	10			
0.5	480	1000	100	10			
0.5	480	1000	220	10			
1.0	480	1000	10	5			
1.0	480	1000	220	5			

### 3 Phase RC Snubber Networks : 400VAC - 600VAC

#### STRCY-xxx and STRCD-xxx series

Applied in parallel with three phase inductive loads (Electrical Motor) to absorb transients Voltage and pulse  
 EMI filter for Electrical Motor  
 Wye and Delta connection  
 High pulse current handling capacity  
 Plastic Case & Epoxy Resin – Flame Retardant meet UL94-V0  
**Varistor** options are available  
 Box and Cylindrical plastic case options

#### Application :

Transient Voltage Suppressor, EMI Filter and Circuit protection for Three phase Motor, CNC equipment, Magnetic Contactor, Solenoid, Relay and Starter

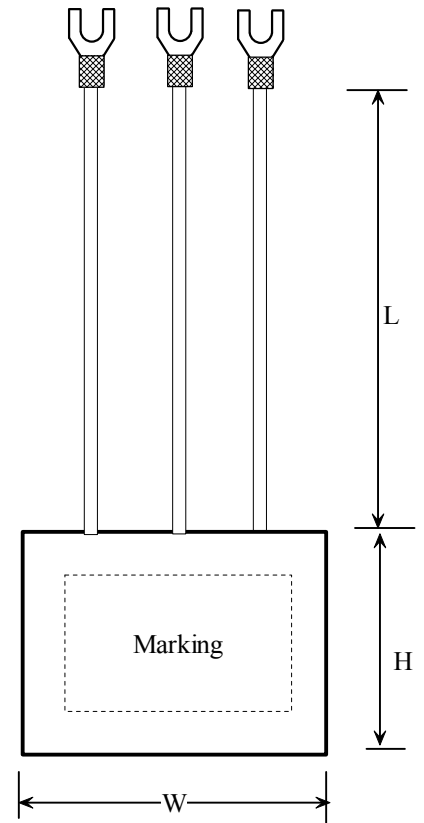
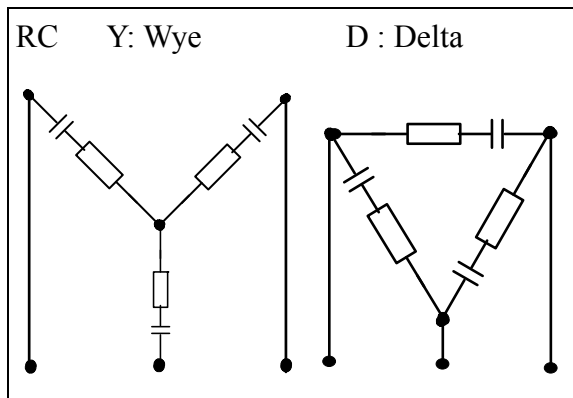
#### Electrical Connection :

Flexible wire : UL #1015,105C, AWG#16, 18  
 Flexible wire with terminal : Ring, Y or Pin terminal with various size

#### General Specifications :

**Capacitance range** : 0.1 – 0.5uF  
**Capacitance tolerance** : ±10% (k)  
**Resistance range** : 22 to 820 ohm 3W - other value is available  
**Rated Voltage** : 3 X 400VAC - 600VAC  
**Temperature range** : -25C - +85C / -40C - +105C

#### Circuitry :



#### Delta :

Capacitance uF	Voltage VAC	Resistor		Box W X H X T	Electrical Wire L in mm
		ohm +/-10%	rated power W		
0.1	3X400	10~330	3	42 x 38 x 27	300 or 600
0.22		27~330	3		
0.5		22~470	3		

#### Wye :

Capacitance uF	Voltage VAC	Resistor		Box W X H X T	Electrical Wire L in mm
		ohm +/-10%	rated power W		
0.1	3X600	10~330	3	42 x 38 x 27	300 or 600
0.22		27~330	3		
0.5		22~470	3		

### 3 Phase RC Snubber Networks : 480VAC

#### STRCY-xxx and STRCD-xxx series

Applied in parallel with three phase inductive loads (Electrical Motor) to absorb transients Voltage and pulse  
 EMI filter for Electrical Motor  
 Wye and Delta connection  
 Very High pulse current handling capacity  
 Plastic Case & Epoxy Resin – Flame Retardant meet UL94-V0  
**Varistor** options are available  
 Cylindrical plastic case

#### Application :

Transient Voltage Suppressor, EMI Filter and Circuit protection for Three phase Motor, CNC equipment, Magnetic Contactor, Solenoid, Relay and Starter

#### Electrical Connection :

Flexible wire : UL #1015,105C, AWG#16, 18  
 Flexible wire with terminal : Ring, Y or Pin terminal with various size

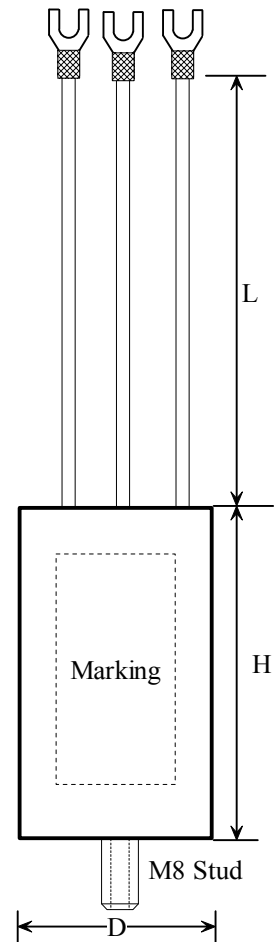
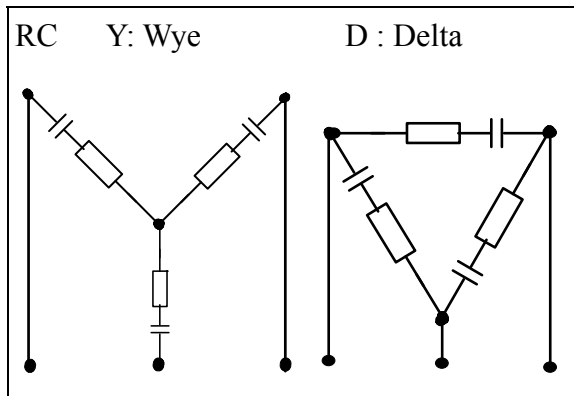
#### Mounting :

M8 stud

#### General Specifications :

**Capacitance range** : 0.5uF  
**Capacitance tolerance** : +/-5%(J) +/-10%(k)  
**Resistance range** : 10 - 680ohm 10W other value is available  
**Rated Voltage** : 3 X 480VAC  
**Temperature range** : -25C - +85C / -40C - +105C

#### Circuitry :



Resistor		Capacitor		Size	Electrical Wire
ohm ±10%	Rated Power W	uF	VAC	D x H mm	L in mm
10	10	0.5	480	45 x 73	300 or 600
15					
22					
27					
33					
47					
68					
82					
100					
150					
220					
330					
470					
680					

## Transient Voltage Suppressors : 24VAC - 480VAC

### STVS-xxx series

- Applied in parallel with inductive loads (Electrical Motor) to absorb transients Voltage and pulse
- EMI filter for Electrical Motor
- High pulse current handling capacity
- Varistor** options is available
- Plastic Case & Epoxy Resin – Flame Retardant meet UL94V0
- Box type and Cylindrical available

### Application :

Transient Voltage Suppressor, EMI Filter and Circuit protection for Three phase Motor, CNC equipment, Magnetic Contactor, Solenoid, Relay and Starter

### Electrical Connection :

Flexible wire : UL #1015,105°C, AWG#16, 18

Flexible wire with terminal : Ring, Y or Pin terminal with various size

### Mounting :

M8 stud – Round type only

### General Specifications :

**Capacitance range** : 0.1 – 0.5uF

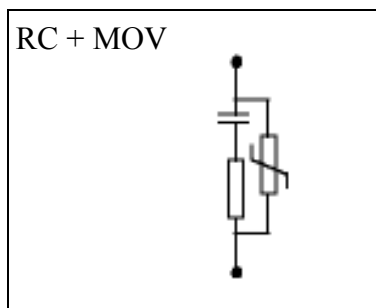
**Capacitance tolerance** : +/-5%(J) +/-10%(k)

**Resistance range** : 22 to 820ohm 1/2-10W other value is available

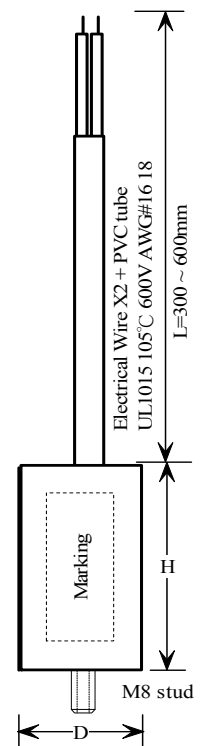
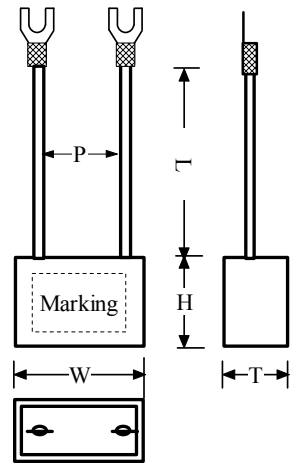
**Rated Voltage** : 24VAC - 480VAC

**Temperature range** : -25C - +85C / -40C - +105C

### Circuitry :



Electrical Wire UL1015 105°C  
AWG#16 18 + Y terminal



### Dimensions :

Capacitance uF	Rated Voltage		Resistance		Varistor	Size	Electrical Wire
	VAC	VDC	ohm +/-10%	rated power W		W x H x T D x H	L in mm
0.22	120	200	47	1/2	Customer design	32 x 22 x 11	150 or 300
0.22	250	470	220	1			
0.47	24	50	220	1/2			
0.47	120	600	220	1			
0.5	120	600	100 - 220	1		39 x 32 x 22	
0.1	250	1000	47	2			
0.1	275	2000	220	2		39 x 32 x 22	
0.47	250	600	100 - 220	2			
0.25	480	1000	470	10		45 x 73	
0.5	480	1000	50 - 220	10			

### 3 Phase Transient Voltage Suppressors : 400VAC - 500VAC

#### STVSYP-xxx series

Applied in parallel with three phase inductive loads (Electrical Motor) to absorb transients Voltage and pulse

EMI filter for Electrical Motor

Wye connection

High pulse current handling capacity

**Varistor** options is available

Plastic Case & Epoxy Resin – Flame Retardant meet UL94-V0

Cylindrical type

#### Application :

Transient Voltage Suppressor, EMI Filter and Circuit protection for Three phase Motor, CNC equipment, Magnetic Contactor, Solenoid, Relay and Starter

#### Electrical Connection :

Flexible wire : UL #1015,105C, AWG#16, 18

Flexible wire with terminal : Ring, Y or Pin terminal with various size

#### Mounting :

M8 stud

#### General Specifications :

**Capacitance range** : 0.22 – 0.5uF

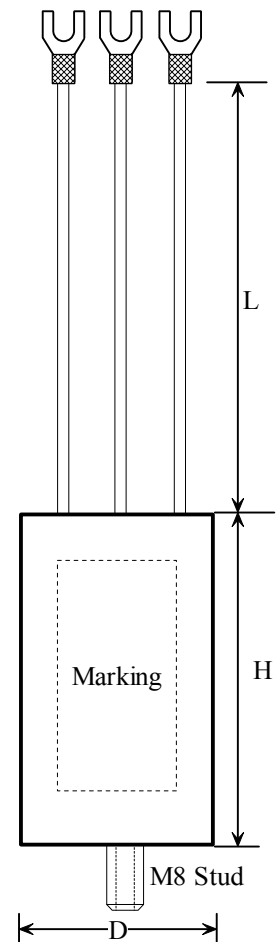
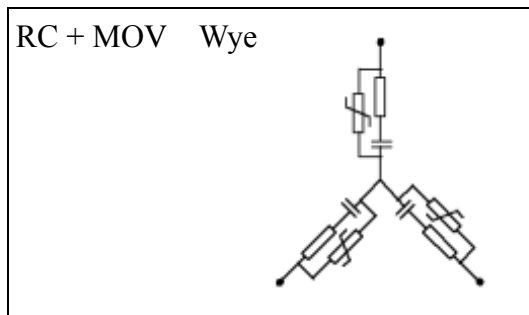
**Capacitance tolerance** : +/-5%(J) +/-10% (k)

**Resistance range** : 22 to 820ohm 1/2-10W other value is available

**Rated Voltage** : 3 X 250VAC - 510VAC

**Temperature range** : -25C - +70C / -40C - +105C

#### Circuitry :



#### Dimensions :

Resistor		Capacitor		Varistor	Size	Electrical Wire
ohm +/-10%	Rated Power W	uF	VAC		D x H mm	L in mm
10~680	10W	0.22	400	Customer design	65 x 50	300 or 600
		0.47	400			
		0.5	500			