

## SPLIT-CORE CURRENT SENSOR



Measure current range: 5A~120A

Max. measure current

Work voltage: 720V

Model of cable: AWG22(UL-1007)

Flame resistance: UL94-V0

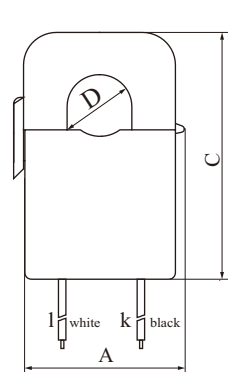
Operation temperature: -25℃~+60℃

Storage temperature: -30℃~+90℃

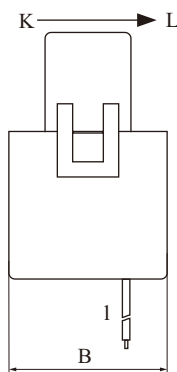
Dielectric strength: AC 3500V/1min  
(between output and shell)

Isolation resistance: >100MΩ(500V DC)  
(between primary and secondary)

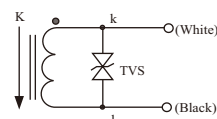
### Dimensions:



Front view

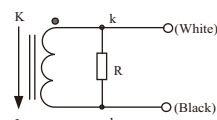


Side view



Built-in two-way protection diode

Current output type



Built-in sampling resistor

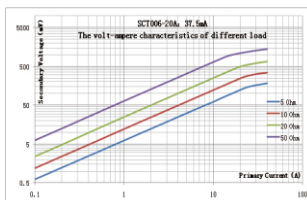
Voltage output type

Schematic diagram

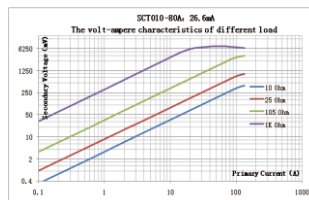
| Size: in(mm) |      |      |    |    |
|--------------|------|------|----|----|
| Model        | A    | B    | C  | ΦD |
| SCT006       | 16.5 | 19   | 29 | 6  |
| SCT010       | 22.8 | 25.8 | 40 | 10 |
| SCT016       | 29.5 | 31   | 46 | 16 |
| SCT016S      | 29.5 | 31   | 46 | 16 |

\*SCT006secondary cable are red and white color

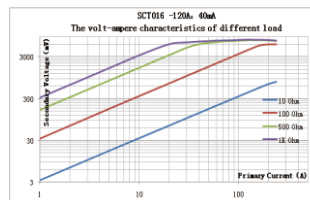
### Typical graph:



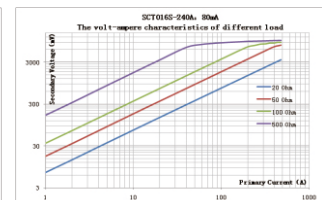
SCT006



SCT010



SCT016



SCT016S

### Technical parameter table: Design according to customer's requirements into voltage type or current type

| Model   | Rated measure current | Max. measure current | Secondary turns | Accuracy | Rated output | Sampling resistance | Work frequency | Secondary impedance | Phase offset | Material of core    | Weight |
|---------|-----------------------|----------------------|-----------------|----------|--------------|---------------------|----------------|---------------------|--------------|---------------------|--------|
| SCT006  | 20A                   | 24A                  | 800±2T          | 1        | 25mA         | 5.1Ω                | 50-1KHz        | 70Ω±10Ω             | +1.5±1°      | Ferrite             | 15     |
| SCT010  | 80A                   | 120A                 | 3000±2T         | 0.5/1    | 26.6mA       | 10Ω                 | 50-1KHz        | 350Ω±35Ω            | +1.5±1°      | Ferrite             | 45     |
| SCT016  | 120A                  | 160A                 | 3000±2T         | 0.5/1    | 40mA         | 10Ω                 | 50-1KHz        | 300Ω±30Ω            | +1±1°        | Ferrite             | 70     |
| SCT016S | 150A                  | 200A                 | 3000±2T         | 0.5/1    | 50mA         | 10Ω                 | 50-60Hz        | 327Ω±33Ω            | +1±1°        | Silicon steel sheet | 85     |

## SPLIT-CORE CURRENT SENSOR



Measure current range: 5A~600A

Max. measure current

Work voltage: 720V

Flame resistance: UL94-V0

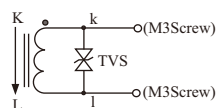
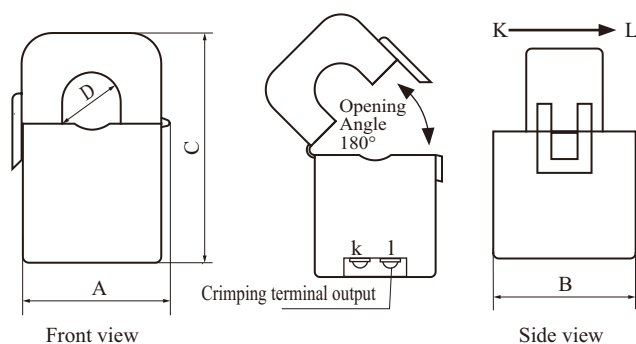
Operation temperature: -25℃~+60℃

Storage temperature: -30℃~+90℃

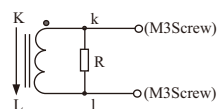
Dielectric strength: AC 3500V/1min  
(between output and shell)

Isolation resistance: >100MΩ (500V DC)  
(between primary and secondary)

### Dimensions:



Built-in two-way protection diode  
Current output type

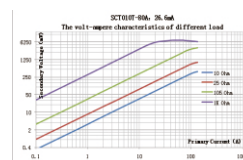


Built-in sampling resistor  
Voltage output type

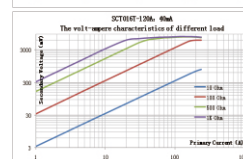
Schematic diagram

| Size:in(mm) |      |      |    |    |
|-------------|------|------|----|----|
| Model       | A    | B    | C  | ΦD |
| SCT010T     | 23   | 26   | 50 | 10 |
| SCT016T     | 29.5 | 31   | 55 | 16 |
| SCT016TS    | 29.5 | 31   | 55 | 16 |
| SCT024TS    | 46   | 34.2 | 75 | 24 |
| SCT036TS    | 57   | 40.5 | 91 | 36 |

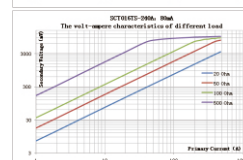
### Typical graph:



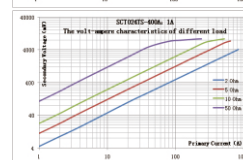
SCT010T



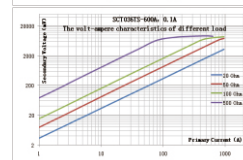
SCT016T



SCT016TS



SCT024TS



SCT036TS

### Technical parameter table: Design according to customer's requirements into voltage type or current type

| Model    | Rated measure current | Max. measure current | Rated output | Accuracy | Secondary turns | Sampling resistance | Work frequency | Phase offset | Secondary impedance | Material of core    | Weight |
|----------|-----------------------|----------------------|--------------|----------|-----------------|---------------------|----------------|--------------|---------------------|---------------------|--------|
| SCT010T  | 80A                   | 120A                 | 26.6mA       | 0.5/1    | 3000±2T         | 10Ω                 | 50-1kHz        | +1.5±1°      | 350Ω ± 35Ω          | Ferrite             | 45g    |
| SCT016T  | 120A                  | 160A                 | 40mA         | 0.5/1    | 3000±2T         | 10Ω                 | 50-1kHz        | +1±1°        | 300Ω ± 30Ω          | Ferrite             | 70g    |
| SCT016TS | 150A                  | 200A                 | 50mA         | 0.5/1    | 3000±2T         | 10Ω                 | 50-60Hz        | +1±1°        | 327Ω ± 33Ω          | Silicon steel sheet | 85g    |
| SCT024TS | 400A                  | 480A                 | 100mA        | 0.5/1    | 4000±3T         | 8Ω                  | 50-60Hz        | +0.5±0.5°    | 295Ω ± 30Ω          | Silicon steel sheet | 204g   |
| SCT036TS | 600A                  | 650A                 | 100mA        | 0.5/1    | 6000±5T         | 5Ω                  | 50-60Hz        | +0.5±0.5°    | 286Ω ± 30Ω          | Silicon steel sheet | 310g   |

## SPLIT-CORE CURRENT SENSOR



Measure current range: 5A~5000A

Max. measure current: 6000A

Phase offset:  $\leq 30'$

Work voltage: 720V

Work frequency: 50-60Hz

Split-core type: double screw fix

Flame resistance: UL94-V0

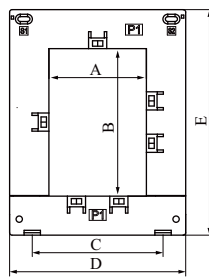
Operation temperature:  $-25^{\circ}\text{C} \sim +60^{\circ}\text{C}$

Storage temperature:  $-30^{\circ}\text{C} \sim +90^{\circ}\text{C}$

Dielectric strength: AC 3500V/1min  
(between output and shell)

Isolation resistance:  $>100\text{M}\Omega$  (500V DC)  
(between primary and secondary)

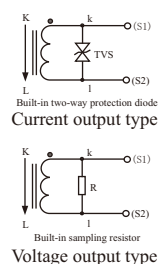
### Dimensions:



Front view

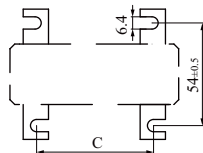


Side view



Schematic diagram

| Size: in(mm) |           |           |           |         |         |           |
|--------------|-----------|-----------|-----------|---------|---------|-----------|
| Model        | A         | B         | C         | D       | E       | G         |
| SCT6040QT    | 42        | 62        | 75        | 114     | 140     | 70        |
| SCT8050QT    | 51        | 81        | 77.5      | 115     | 148     | 54        |
| SCT8080QT    | 81        | 81        | 107.5     | 145     | 148     | 54        |
| SCT12080QT   | 80.5      | 121.8     | 108       | 145.5   | 192.5   | 54        |
| SCT16080QT   | 81        | 161.5     | 112       | 185     | 245.2   | 70        |
| SCT13050QT   | 51        | 131       | 81.5      | 121     | 203     | 66        |
| SCT22080QT   | 81        | 221       | 112       | 185     | 305     | 70        |
| Tolerance    | $\pm 0.5$ | $\pm 0.5$ | $\pm 0.5$ | $\pm 1$ | $\pm 1$ | $\pm 0.5$ |



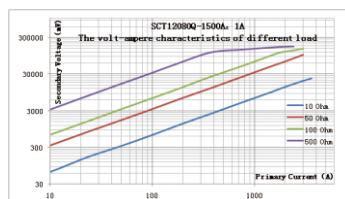
Sub-plate mount, feet size

### Technical parameter table:

Design according to customer's requirements into voltage type or current type

| Model      |      | Output: 1A |      |      | Output: 5A |      |
|------------|------|------------|------|------|------------|------|
|            |      | 0.5        | 1    | 3    | 0.5        | 1    |
| SCT6040QT  | 250  | 1.5        | 2.5  | 3.75 | 1.5        | 2.5  |
|            | 600  | 3.75       | 7.5  | 10   | 5          | 7.5  |
|            | 1000 | 5          | 10   | 15   | 7.5        | 10   |
|            | 1500 | 7.5        | 10   | 20   | 10         | 15   |
|            | 2000 | 10         | 15   | 25   | 15         | 20   |
| SCT8050QT  | 250  | 1.5        | 2.5  | 5    | 1.5        | 2.5  |
|            | 400  | 2          | 3.75 | 7.5  | 2.5        | 5    |
|            | 500  | 2.5        | 5    | 7.5  | 3.75       | 5    |
|            | 800  | 3.75       | 5    | 10   | 5          | 7.5  |
|            | 1000 | 5          | 7.5  | 10   | 5          | 10   |
| SCT8080QT  | 250  | ---        | 1.5  | 2.5  | ---        | 1.5  |
|            | 400  | 1.5        | 2.5  | 5    | 1.5        | 2.5  |
|            | 500  | 2.5        | 3.75 | 5    | 2.5        | 5    |
|            | 800  | 2.5        | 5    | 7.5  | 2.5        | 5    |
|            | 1000 | 5          | 7.5  | 10   | 5          | 10   |
| SCT12080QT | 500  | 2.5        | 3.75 | 5    | 2.5        | 5    |
|            | 600  | 2.5        | 3.75 | 5    | 2.5        | 5    |
|            | 800  | 2.5        | 5    | 7.5  | 2.5        | 5    |
|            | 1000 | 5          | 7.5  | 10   | 5          | 10   |
|            | 1500 | 7.5        | 10   | 15   | 7.5        | 10   |
| SCT13050QT | 600  | 2.5        | 3.75 | 5    | 2.5        | 3.75 |
|            | 800  | 2.5        | 3.75 | 5    | 2.5        | 5    |
|            | 1000 | 2.5        | 5    | 7.5  | 2.5        | 5    |
|            | 1500 | 5          | 7.5  | 10   | 5          | 7.5  |
|            | 2000 | 7.5        | 10   | 15   | 7.5        | 10   |
| SCT16080QT | 1000 | 5          | 10   | 15   | 5          | 7.5  |
|            | 1500 | 7.5        | 10   | 15   | 7.5        | 10   |
|            | 2000 | 7.5        | 15   | 20   | 10         | 15   |
|            | 2500 | 7.5        | 15   | 25   | 10         | 15   |
|            | 3000 | 10         | 20   | 25   | 15         | 20   |
| SCT22080QT | 3500 | 10         | 20   | 30   | 15         | 20   |
|            | 4000 | 10         | 25   | 30   | 20         | 25   |
|            | 1000 | 5          | 7.5  | 10   | 5          | 7.5  |
|            | 1500 | 5          | 7.5  | 10   | 5          | 7.5  |
|            | 2000 | 7.5        | 10   | 15   | 7.5        | 10   |
| SCT22080QT | 2500 | 7.5        | 10   | 15   | 7.5        | 10   |
|            | 3000 | 10         | 15   | 20   | 10         | 15   |
|            | 3500 | 10         | 15   | 20   | 10         | 20   |
|            | 4000 | 15         | 20   | 25   | 15         | 20   |
|            | 5000 | 15         | 20   | 25   | 15         | 25   |

### Typical graph:



SCT12080QT

## SPLIT-CORE CURRENT SENSOR



Measure current range: 5A~3000A

Max. measure current

Phase offset:  $\leq 30'$

Work voltage: 720V

Flame resistance: UL94-V0

Operation temperature:  $-25^{\circ}\text{C} \sim +80^{\circ}\text{C}$

Storage temperature:  $-35^{\circ}\text{C} \sim +95^{\circ}\text{C}$

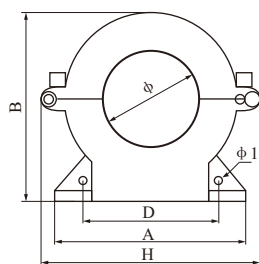
Model of cable: AWG17/AWG20, length 1m

Dielectric strength: AC 3500V/1 min  
(between output and shell)

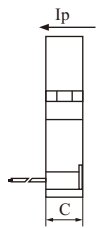
Isolation resistance:  $> 100\text{M}\Omega$  (500V DC)  
(between primary and secondary)

\*SCT065BT

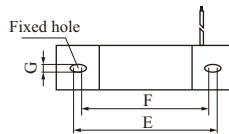
### Dimensions:



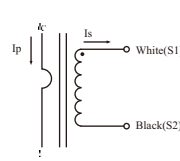
Front view



Side view

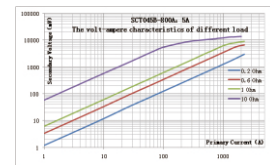


Bottom view

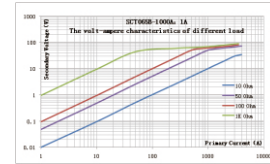


Schematic diagram

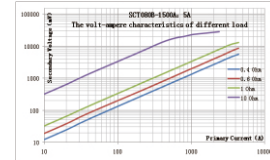
| Size: in(mm) |     |     |    |      |     |     |     |     |      |    |
|--------------|-----|-----|----|------|-----|-----|-----|-----|------|----|
| Model        | A   | B   | C  | D    | E   | F   | G   | H   | Φ    | Φ1 |
| SCT025B      | 80  | 75  | 22 | 56   | 68  | 58  | 5.2 | 98  | 26.5 | 5  |
| SCT045B      | 109 | 107 | 26 | 71.5 | 95  | 80  | 5.2 | 128 | 46   | 5  |
| SCT065B(T)   | 129 | 127 | 26 | 91   | 115 | 99  | 5.2 | 147 | 65   | 5  |
| SCT080B(T)   | 144 | 144 | 28 | 97   | 128 | 110 | 5.2 | 163 | 81   | 5  |
| SCT100B(T)   | 175 | 175 | 30 | 127  | 155 | 125 | 5.2 | 201 | 100  | 5  |



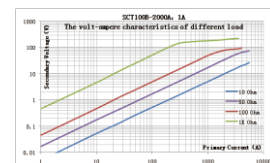
SCT045B



SCT065B



SCT080B



SCT100B

### Technical parameter table: Design according to customer's requirements into voltage type or current type

| Model      | Rated measure current | Rated output | Work frequency | Accuracy  | Output mode                | Material of core    | Weight |
|------------|-----------------------|--------------|----------------|-----------|----------------------------|---------------------|--------|
| SCT025B    | 50A~400A              | 1A/5A        | 50Hz-60Hz      | 0.5/1     | Cable                      | Silicon steel sheet | --     |
| SCT045B    | 50A~1000A             | 1A/5A        | 50Hz-60Hz      | 0.2/0.5/1 | Cable                      | Silicon steel sheet | 409g   |
| SCT065B(T) | 100A~1500A            | 1A/5A        | 50Hz-60Hz      | 0.2/0.5/1 | Cable or crimping terminal | Silicon steel sheet | 450g   |
| SCT080B(T) | 100A~2000A            | 1A/5A        | 50Hz-60Hz      | 0.2/0.5/1 | Cable or crimping terminal | Silicon steel sheet | --     |
| SCT100B(T) | 200A~3000A            | 1A/5A        | 50Hz-60Hz      | 0.2/0.5/1 | Cable or crimping terminal | Silicon steel sheet | 1210g  |