22A



### SBT series - 50/60Hz current sensor - 22A

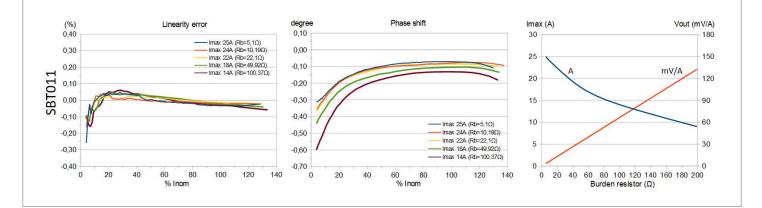
- High precision 50/60Hz current measuring transformers
- Encapsulated in UL94/V-0 epoxy resin
- High insulation between primary/secondary
- Custom versions on request



### 22A

Code	Max Input Current <sup>1</sup>	Nom Input Current <sup>1</sup>	Accuracy Class <sup>2</sup>	Burden resistor <sup>3</sup>	Sec turns	Dielectric strength <sup>4</sup>
SBT011	22A	18.3A	0.5	22 Ω	1500	4KV

Dimensions	mm	Drawing	.stp file Download
A max	17.5	АВ	
B max	9.7	C potting side	
H max	21.0		
C typ (Ø)	5.0	I C C C C C C C C C C C C C C C C C C C	STP
X typ	12.7		
L min	3.0		
D typ (Ø)	0.8		



<sup>4</sup> Between sec pins/primary hole internal surface.

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<sup>&</sup>lt;sup>1</sup> Accuracy range 5...120% of "Nom Input Current". Currents up to "Max Input Current" x 1.2 can be applied continuously.

Low current range measurement: it is suggested to increase primary turns number. It reduce proportionally Max/Nom input current and preserve the accuracy typical curves.

<sup>&</sup>lt;sup>2</sup> The accuracy class above indicated means that the linearity and phase shift errors are within the tolerances defined on tab.201 of IEC 61869-2, tested at 50Hz-20°C ambient temperature. The standard has not been fully applied since these items are designed as components of electronic equipment.

<sup>&</sup>lt;sup>3</sup> Burden resistor values different than suggested values can be applied. It will affect Max/Nom current, output voltage and precision. See the typical graphs for reference.

<sup>&</sup>lt;sup>nb</sup> The user should perform any compliance verification to technical and safety standard requirement according to the application field.



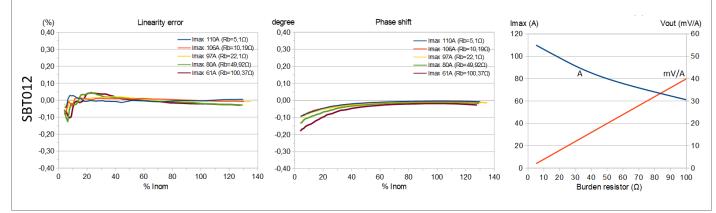
#### SBT series - 50/60Hz current sensor - 106A

- Very high precision 50/60Hz current measuring transformers
- High output signal level to reduce noise-signal ratio
- High repeatability, actual curves close to typical
- Encapsulated in UL94/V-0 epoxy resin
- High insulation between primary/secondary
- Custom versions on request

### 106A

Code	Max Input Current <sup>1</sup>	Nom Input Current <sup>1</sup>	Accuracy Class <sup>2</sup>	Burden resistor <sup>3</sup>	Sec. turns	Dielectric strength <sup>4</sup>
SBT012	106A	88.3A	0.1	10 Ω	2500	4KV

Dimensions	mm	Drawing	.stp file Download
A max	24.3	A B	
B max	11.7	potting side	
H max	25.5	I C	
C typ (Ø)	9.5		्याय
X typ	15.24		T.
X1 typ	7.62	X potting Vout	
Y typ	7.62		
L min	3.5	bottom view	
D typ (Ø)	0.8	Pin 3 only for mechanical connection	



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<sup>&</sup>lt;sup>1</sup> Accuracy range 5...120% of "Nom Input Current". Currents up to "Max Input Current" x 1.2 can be applied continuously.

Low current range measurement: it is suggested to increase primary turns number. It reduce proportionally Max/Nom input current and preserve the accuracy typical curves.

<sup>&</sup>lt;sup>2</sup> The accuracy class above indicated means that the linearity and phase shift errors are within the tolerances defined on tab.201 of IEC 61869-2, tested at 50Hz-20°C ambient temperature. The standard has not been fully applied since these items are designed as components of electronic equipment.

 <sup>&</sup>lt;sup>3</sup> Burden resistor values different than suggested values can be applied. It will affect Max/Nom current, output voltage and precision. See the typical graphs for reference.
 <sup>4</sup> Between sec pins/primary hole internal surface.

<sup>&</sup>lt;sup>nb</sup> The user should perform any compliance verification to technical and safety standard requirement according to the application field.

# 120A



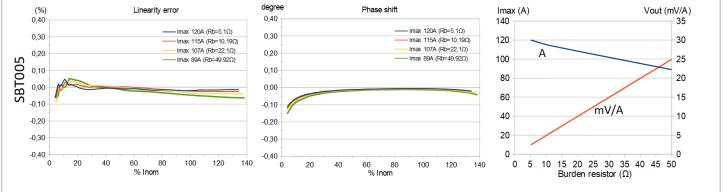
#### SBT series - 50/60Hz current sensor - 120A

- Very high precision 50/60Hz current measuring transformers
- High output signal level to reduce noise-signal ratio
- High repeatability, actual curves close to typical
- Encapsulated in UL94/V-0 epoxy resin
- High insulation between primary/secondary
- Custom versions on request

### 120A

Code	Max Input Current <sup>1</sup>	Nom Input Current <sup>1</sup>	Accuracy Class <sup>2</sup>	Burden resistor <sup>3</sup>	Sec. turns	Dielectric strength <sup>4</sup>
SBT005	120A	100A	0.1	5 Ω	2000	4KV

Dimensions	mm	Drawing	.stp file Download
A max	24.8	A B	
B max	13.0	potting side	
H max	25.4	I I I I I I I I I I I I I I I I I I I	
C typ (Ø)	9.5		
X typ	14.8		STP
X1 typ	19.0	X potting Vout	
Y typ	11.0	$X1 \rightarrow 2$	
L min	3.5	bottom view	
D typ (Ø)	1.0	pins 3 and 4 only for mechanical connection	



Between sec pins/primary hole internal surface.

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<sup>&</sup>lt;sup>1</sup> Accuracy range 5...120% of "Nom Input Current". Currents up to "Max Input Current" x 1.2 can be applied continuously.

Low current range measurement: it is suggested to increase primary turns number. It reduce proportionally Max/Nom input current and preserve the accuracy typical curves.

<sup>&</sup>lt;sup>2</sup> The accuracy class above indicated means that the linearity and phase shift errors are within the tolerances defined on tab.201 of IEC 61869-2, tested at 50Hz-20°C ambient temperature. The standard has not been fully applied since these items are designed as components of electronic equipment.

<sup>&</sup>lt;sup>3</sup> Burden resistor values different than suggested values can be applied. It will affect Max/Nom current, output voltage and precision. See the typical graphs for reference.

<sup>&</sup>lt;sup>nb</sup> The user should perform any compliance verification to technical and safety standard requirement according to the application field.



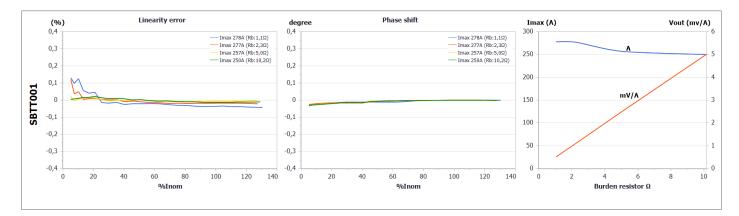
#### SBT series - 50/60Hz three-phase current sensor - 3x250A

- Very high precision 50/60Hz three-phase current measuring transformers
- High output signal level to reduce noise-signal ratio
- High repeatability, actual curves close to typical
- Encapsulated in UL94/V-0 epoxy resin
- High insulation between primary/secondary
- Custom versions on request

## 250A

Code	Max Input Current <sup>1</sup>	Nom Input Current <sup>1</sup>	Accuracy Class <sup>2</sup>	Burden resistor <sup>3</sup>	Sec. turns	Dielectric strength <sup>4</sup>
SBTT001	250A	208.3A	0.1	10 Ω	3x 2000	ЗКV

Dimensions	mm	Drawing					
A max	100.5	Potting side					
B max	28.7						
H max	39.6						
D typ (Ø)	9.5						
E typ	30.0	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	STP				
F typ	4.0						
G typ	12.0	B G D Potting side Iout V					
l typ (Ø)	91.0	Potting side 1					



<sup>2</sup> The accuracy class above indicated means that the linearity and phase shift errors are within the tolerances defined on tab.201 of IEC 61869-2, tested at 50Hz-20°C ambient temperature. The standard has not been fully applied since these items are designed as components of electronic equipment.

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<sup>&</sup>lt;sup>1</sup> Accuracy range 5...120% of "Nom Input Current". Currents up to "Max Input Current" x 1.2 can be applied continuously.

Low current range measurement: it is suggested to increase primary turns number. It reduce proportionally Max/Nom input current and preserve the accuracy typical curves.

<sup>&</sup>lt;sup>3</sup> Burden resistor values different than suggested values can be applied. It will affect Max/Nom current, output voltage and precision. See the typical graphs for reference. <sup>4</sup> Between sec pins/primary hole internal surface.

<sup>&</sup>lt;sup>nb</sup> The user should perform any compliance verification to technical and safety standard requirement according to the application field.



#### SBT series - 50/60Hz current sensor - 46A

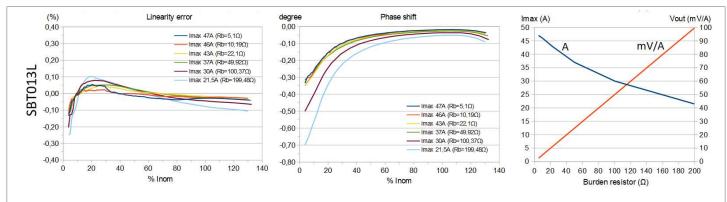
- High precision 50/60Hz leaded current measuring transformers
- Encapsulated in UL94/V-0 epoxy resin
- High insulation between primary/secondary
- Custom versions on request



### 46A

Code	Max Input Current <sup>1</sup>	Nom Input Current <sup>1</sup>	Accuracy Class <sup>2</sup>	Burden resistor <sup>3</sup>	Sec. turns	Dielectric strength <sup>4</sup>
SBT013L	46A	38.3A	0.5	10 Ω	2000	4KV

Dimensions	mm	Drawing	.stp file Download
A max	23.0	АВ	
B max	10.4	potting	
H max	26.5	side T	STP
C typ (Ø)	8.9	$\mathbf{I}$	Ţ
L typ	105.0		
		— ŢŢ lout¥∎	



<sup>1</sup> Between sec pins/primary hole internal surface.

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<sup>&</sup>lt;sup>1</sup> Accuracy range 5...120% of "Nom Input Current". Currents up to "Max Input Current" x 1.2 can be applied continuously.

Low current range measurement: it is suggested to increase primary turns number. It reduce proportionally Max/Nom input current and preserve the accuracy typical curves.

<sup>&</sup>lt;sup>2</sup> The accuracy class above indicated means that the linearity and phase shift errors are within the tolerances defined on tab.201 of IEC 61869-2, tested at 50Hz-20°C ambient temperature. The standard has not been fully applied since these items are designed as components of electronic equipment..

<sup>&</sup>lt;sup>3</sup> Burden resistor values different than suggested values can be applied. It will affect Max/Nom current, output voltage and precision. See the typical graphs for reference.

<sup>&</sup>lt;sup>nb</sup> The user should perform any compliance verification to technical and safety standard requirement according to the application field.



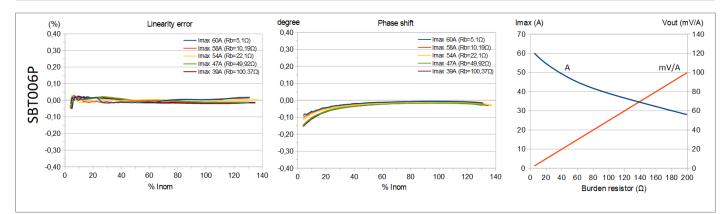
#### SBT series - 50/60Hz current sensor - 58A

- High precision 50/60Hz current measuring transformers
- Built-in single-turn primary with very low DCR
- Encapsulated in UL94/V-0 epoxy resin
- High insulation between primary/secondary
- Custom versions on request

### 58A

Code	Max Input Current <sup>1</sup>	Nom Input Current <sup>1</sup>	Accuracy Class <sup>2</sup>	Burden resistor <sup>3</sup>	Sec. turns	Dielectric strength <sup>4</sup>
SBT006P	58A	48.3A	0.2	10 Ω	2000	ЗКУ

Dimensions	mm	Drawing	Trise	.stp file Download
A max	25.8			
B max	18.5	Sec side		
H max	20.5		Trise typ @Ta20°C	
X typ	19.0		40	
X1 typ	6.0	$ \begin{array}{c c} \downarrow & \blacksquare & \blacksquare & \blacksquare & \blacksquare \\ I_{out} & I_{in} & \bigcirc & \bigcirc \\ \end{array} $	12 30 50 50 50 50 50 50 50 50 50 50 50 50 50	STP
Y typ	9.0		20	
Y1 typ	2.0	Y X 30 04	10	
L min	2.5		0 10 20 30 40 50 60 70 Current (AC rms)	
D typ (Ø)	3.5	D1		
D1 typ (Ø)	0.8			



<sup>2</sup> The accuracy class above indicated means that the linearity and phase shift errors are within the tolerances defined on tab.201 of IEC 61869-2, tested at 50Hz-20°C ambient temperature. The standard has not been fully applied since these items are designed as components of electronic equipment.

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Low current range measurement: it is suggested to increase primary turns number. It reduce proportionally Max/Nom input current and preserve the accuracy typical curves.

<sup>&</sup>lt;sup>3</sup> Burden resistor values different than suggested values can be applied. It will affect Max/Nom current, output voltage and precision. See the typical graphs for reference. <sup>4</sup> Between sec pins/primary hole internal surface.

<sup>&</sup>lt;sup>nb</sup> The user should perform any compliance verification to technical and safety standard requirement according to the application field.