



# Technical Data Sheet

## *Theta CT*



*Theta CT* With Transducer for the measurement of AC current. Theta CT a very reliable, efficient and robust current transformer for measurement of AC current. It provides 4 to 20 mA or 0 to 20mA DC output.

### Special Features

- Two products in one - single device serves functionality of both current transformer as well as transducer
- Measurement of AC current for frequency 50/60Hz
- Provides proportional 4 ... 20 mA or 0 ... 20 mA DC output
- High output load resistance up to 1000 ohm
- Two models for True RMS and Average type measurement available
- Easy and safe electrical connection by means of spring clamp terminal

## Current Transformers with Transducer - Measurement of AC current

- Theta CT is a very reliable, efficient and robust current transformer for measurement of AC current. It provides 4 ... 20 mA or 0 ... 20mA DC output.
- It is useful in
  - Data Monitoring & Network Analysis
  - Measurement of non - sinusoidal and distorted networks

### Technical Data

<b>Measuring Range (In)</b>	0 ... 300 A AC or 0 ... 750 A AC (Refer Model Info Table)
<b>Input Frequency Range</b>	50/ 60 Hz
<b>DC Current Output</b>	4... 20 mA , 0...20 mA
<b>Bent Characteristics</b>	R <sub>B</sub> 750 ff, R <sub>B</sub> 1000 ff (U <sub>H</sub> > 24 V DC)
<b>Current Limit Under Overload</b>	< 30 mA
<b>Accuracy (IEC 60688)</b>	+/- 0.5 %
<b>Max. Operating Voltage U<sub>m</sub></b>	0.72 kV, U <sub>eff</sub>
<b>Isolation Test Voltage (IEC 61010-1)</b>	6.4 kV AC , 50 Hz, 60 Seconds Primary Conductor Vs Measuring Output Housing Vs Measuring output and Auxiliary supply
<b>Auxiliary Voltage</b>	24 V DC, +/- 15% (external protection via fuse 250 mA / 250 V, fast)
<b>Current Consumption</b>	< 50 mA
<b>Response Time</b>	< 600ms
<b>Installation Category</b>	III
<b>Thermal Nominal Continuous Rated Current</b>	1.2 x I <sub>n</sub>
<b>Protection Class</b>	IP20
<b>Operating Temperature and Humidity</b>	0 ... 70 °C, 0 ... 95% rH without condensation
<b>Storage Temperature</b>	-40 ... 90 °C
<b>Max. Temperature of Primary Conductor</b>	100° C

### Applicable Technical Standards

<b>Electromagnetic Compatibility</b>	IEC-61326-1, Table 2
<b>Immunity</b>	IEC 61000-4-2
	IEC 61000-4-3
	IEC 61000-4-4
	IEC 61000-4-6
	IEC 61000-4-8
	Short term measured value deviation of +/-1% may occur during electromagnetic interference thus reducing the specified operating quality
<b>Emission</b>	CISPR 11
<b>Safety</b>	IEC 61010-1, 2010
<b>Accuracy</b>	IEC 60688, 2012

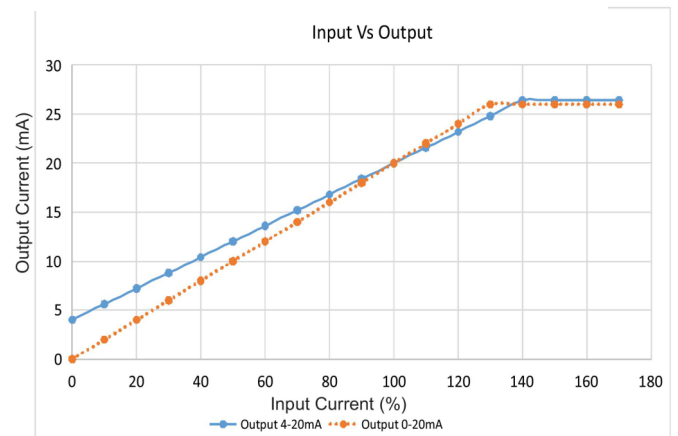
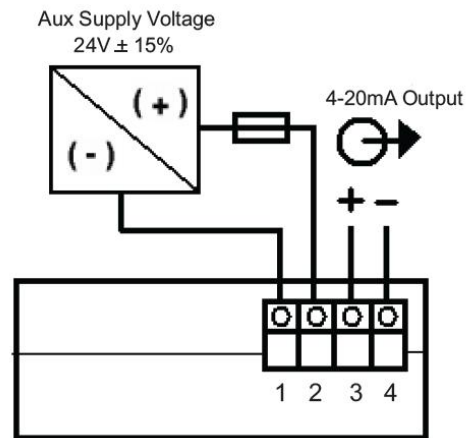
## Electric Connections

### Measuring Ranges

Iout -	Iout +	UH+	Ground
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Spring clamp terminal  
 Connection cross sections: 0.08 ... 2.5 mm<sup>2</sup>

## Connection Diagram

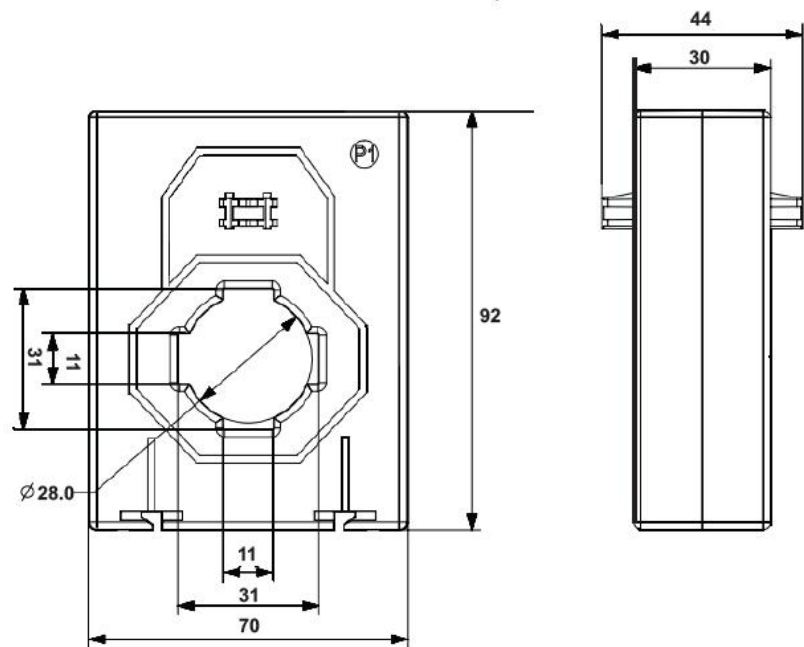


## Dimensions

Model 70 x 30 mm

Transformer width : 70 mm  
Transformer height : 92 mm  
Transformer depth : 44 mm

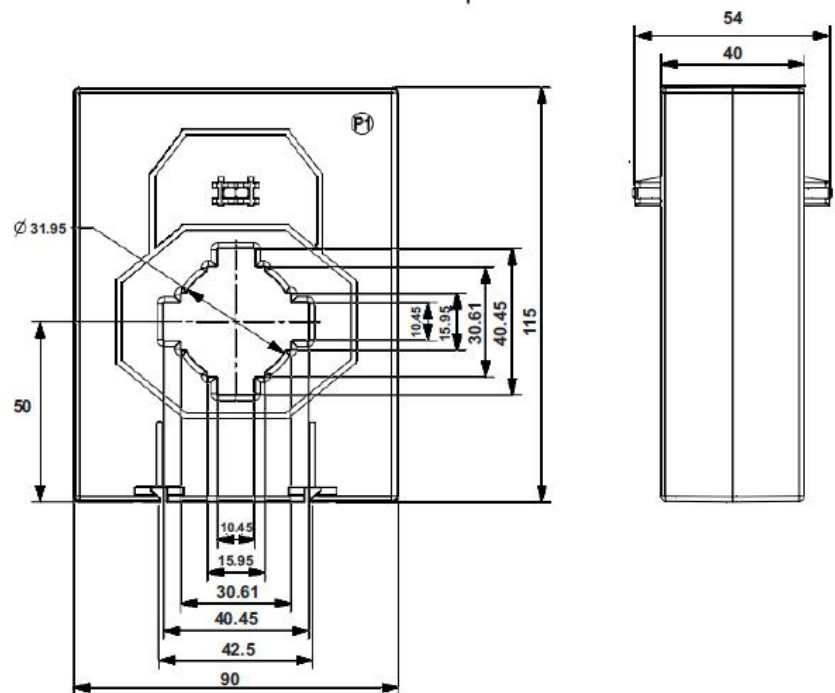
Bus bar: 30 x 10 mm  
Round conductor: 28 mm



Model 90 x 40 mm

Transformer width : 90 mm  
Transformer height : 115 mm  
Transformer depth : 58 mm

Bus bar : 30 x 10 mm  
Round conductor : 31.5 mm



**Theta CT, CT with Transducer options**

Type	Primary Current (AC)	Current Output (mA DC)
Theta CT 70 x 30mm ( TRMS or Average)	50	4 ... 20 mA or 0 ... 20 mA
	100	
	150	
	200	
	250	
	300	
Theta CT 90 x 40 mm (TRMS or Average)	150	4 ... 20 mA or 0 ... 20 mA
	200	
	250	
	300	
	400	
	500	
	600	
	750	

## Ordering Information

Product Code	PR10-	X	X	X	X	X	X	0	0	0	0	OST



**sifam tinsley**  
PRECISION INSTRUMENTATION

**Sifam Tinsley Instrumentation Inc.**  
3105, Creekside Village Drive,  
Suite No. 801, Kennesaw,  
GA 30144 (USA)  
**E-mail Id :** [psk@sifamtinsley.com](mailto:psk@sifamtinsley.com)  
**Web :** [www.sifamtinsley.com](http://www.sifamtinsley.com)  
**Contact No. :** +1 404 736 4903

**Sifam Tinsley Instrumentation Ltd**  
Unit 1 Warner Drive,  
Springwood Industrial Estate  
Braintree, Essex, UK, CM72YW  
**E-mail:** [sales@sifamtinsley.com](mailto:sales@sifamtinsley.com)  
**Web:** [www.sifamtinsley.com/uk](http://www.sifamtinsley.com/uk)  
**Contact:** +44(0)1803615139