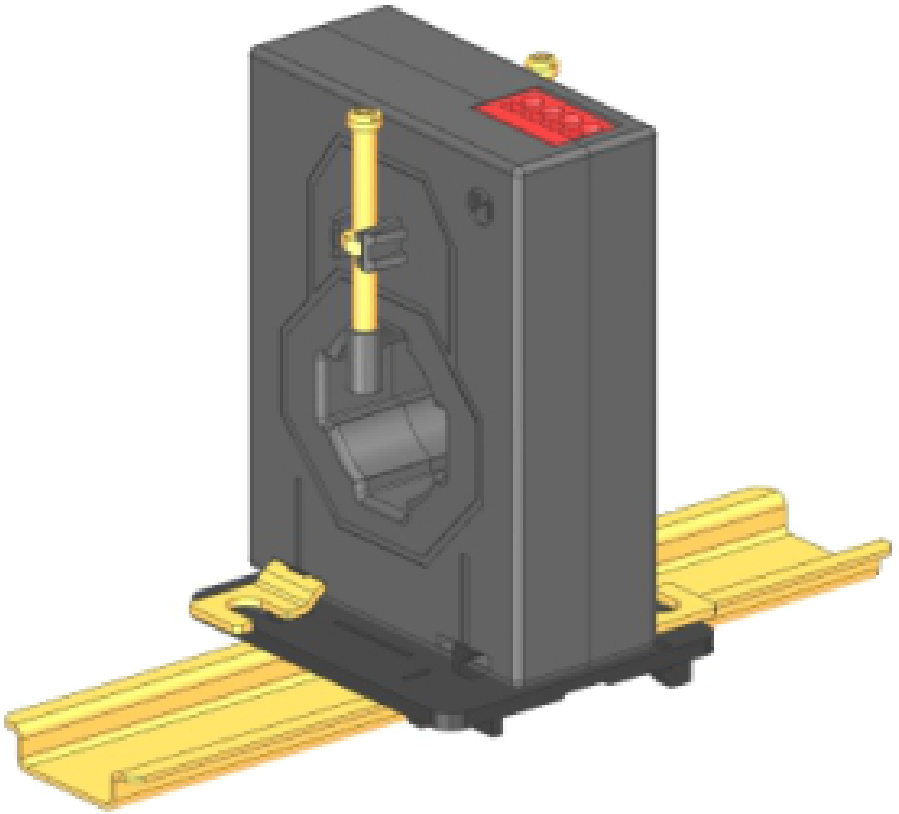
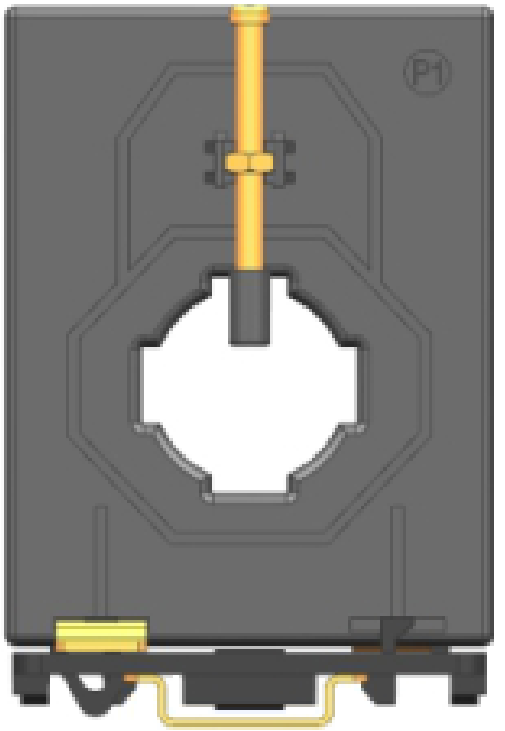
Operating Instructions for Theta CT 50...750 A AC





Current Transformers 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. It can be used for

- For network analysis , monitoring
- Measuring of non - sinusoidal and distorted networks

Features:

1) Measurement of AC current for frequency 50/60Hz , Provides proportional 4 - 20 mA or 0-20 mA DC output

2) High electric isolation between primary conductor and output.

3) Easy and safety electrical connection by means of spring clamp terminal.

4) Direct mounting onto the bus bar by means of integrated fixing screws which are part of the unit.

5) Mounting onto 35 mm DIN rail by means of optional supply of snap on mounting.

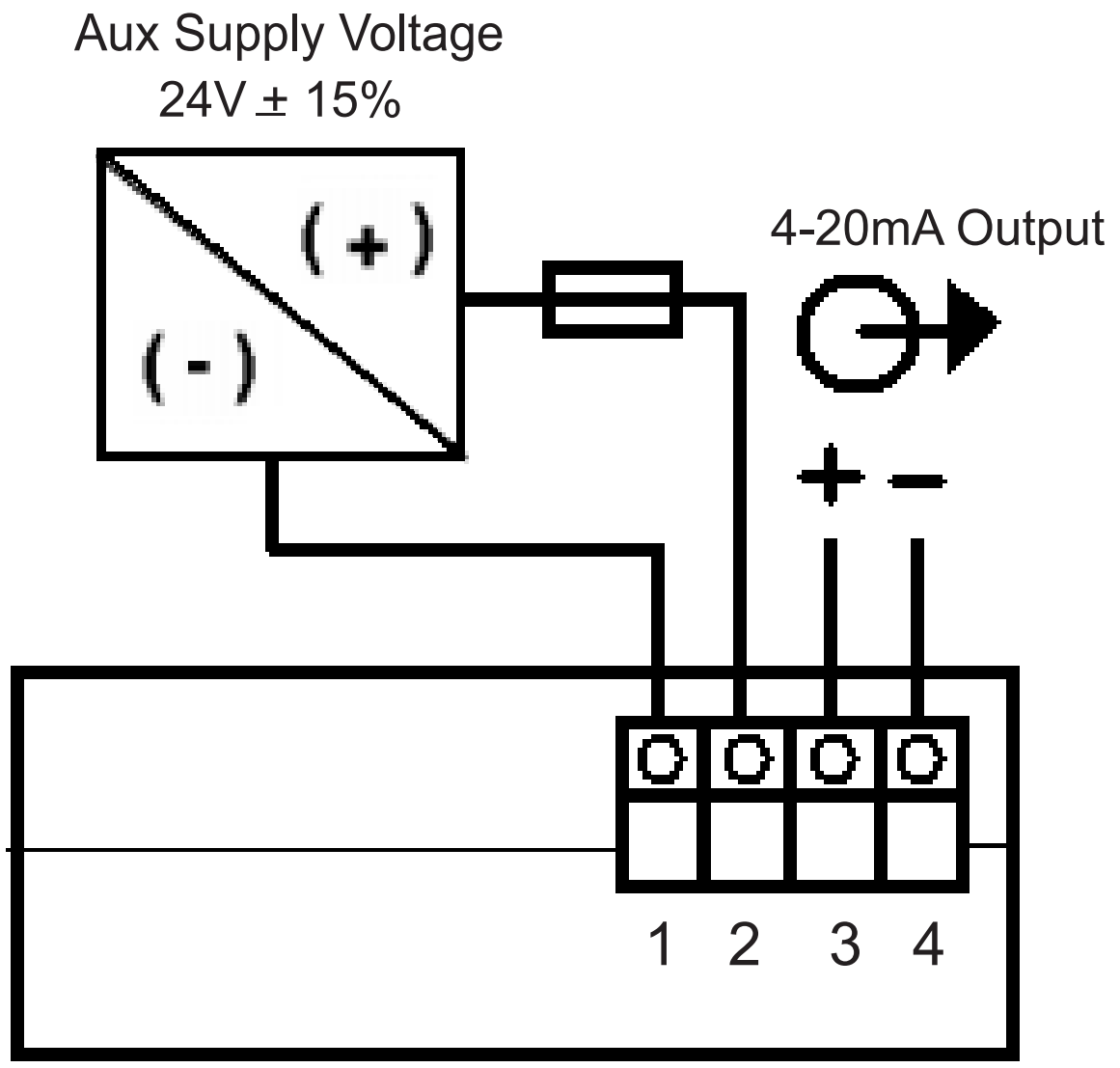
Technical data:

Measuring range (In):	0…300 A AC Or 0....750 A AC (Refer Model Info Table)
Frequency range:	50/60 Hz
DC Current output	DC: 4… 20 mA , 0...20 mA
Max. burden resistance at current output:	R_B 750 Ω, R_B 1000 Ω ($U_H \geq$ 24 V DC)
Current limit under overload	< 30 mA
Accuracy: (IEC 60688)	± 0.5 %
Max. operating voltage U_m	0.72 kV, U_{eff}
Isolation test voltage (IEC 61010-1)	6.4 kV AC, 50 Hz, 60 Seconds Primary Conductor Vs Measuring Output Housing Vs Measuring output and Auxiliary supply
Auxiliary voltage:	24 V DC, ± 15% (external protection via fuse 250 mA / 250 V, fast)
Current Consumption:	< 50 mA
Response time	< 600ms
Installation category	III
Thermal nominal continuous rated current	1.2 x In
Protection class	IP 20
Operating temperature:	0° C < T_U < +70° C, 0…95% rH, without condensation
Storage temperature:	-40° C < T_L < +90° C
Max. temperature of primary conductor:	100° C

Applicable technical standards:

IEC 60688, 2012
IEC 61010_1, 2010

Connection Diagram:

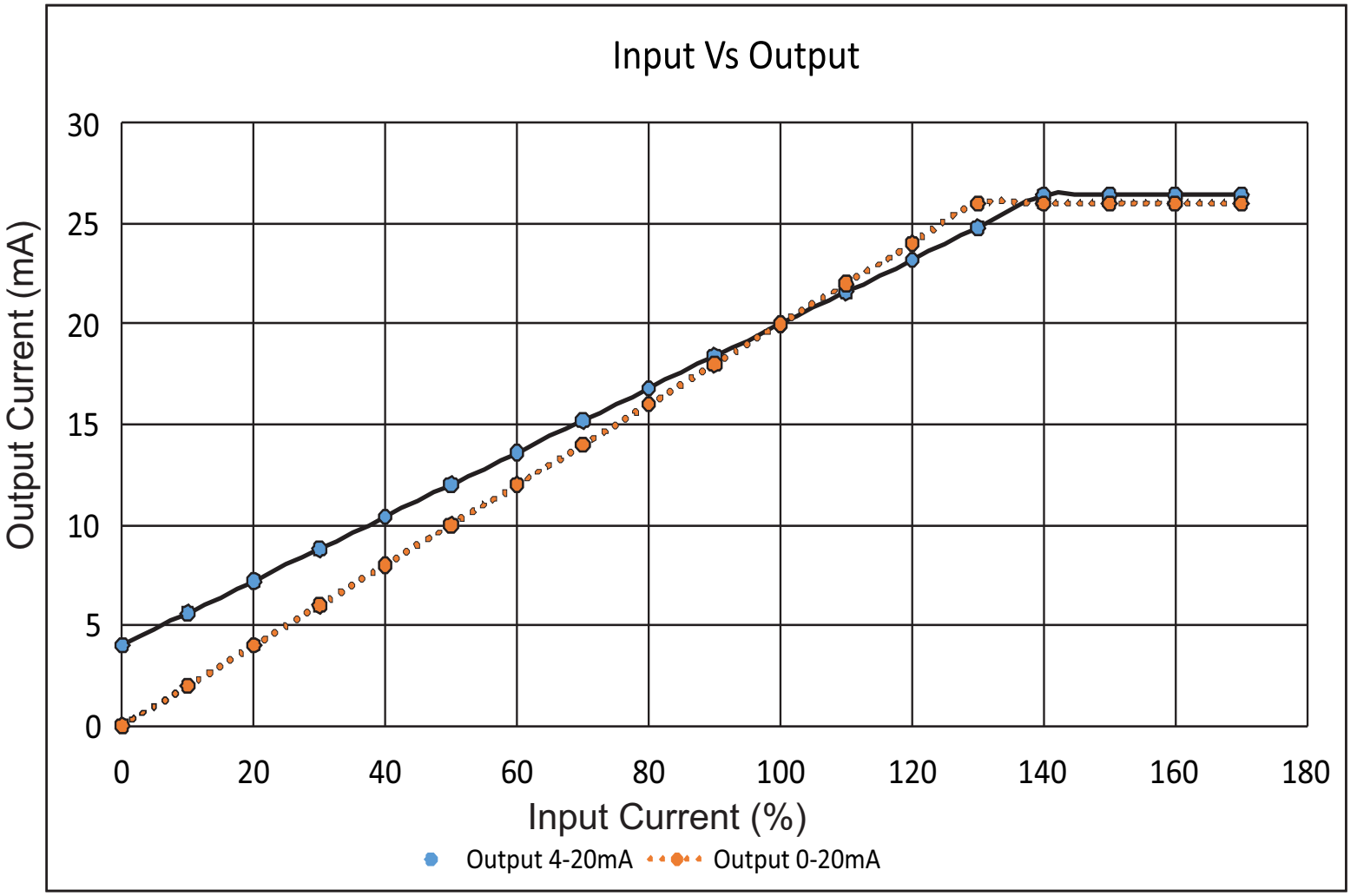


Electric connections:

I_{out} - I_{out} + U_H + Ground

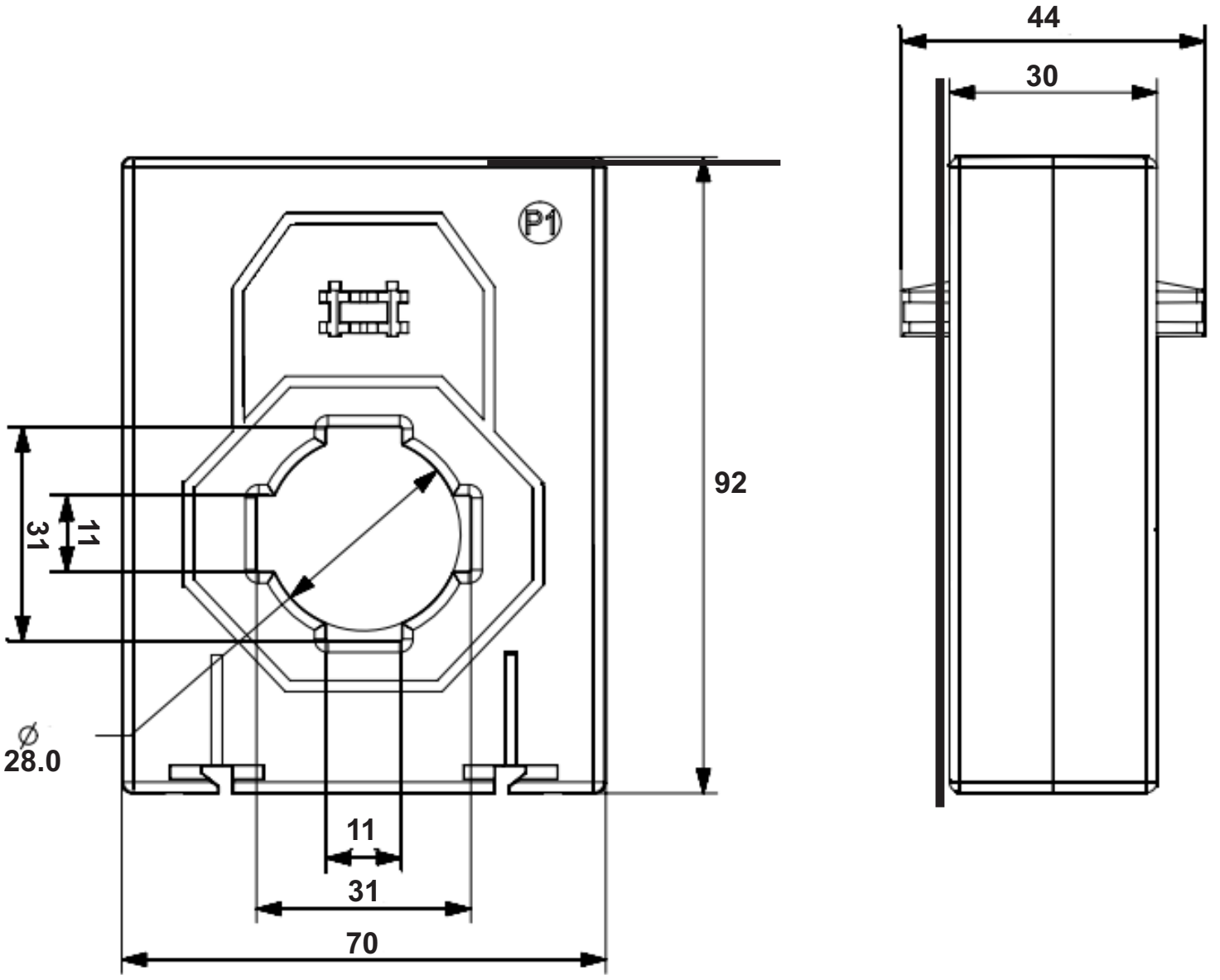
Spring clamp terminal

Connection cross sections: 0.08…2.5 mm²



Theta CT Models:

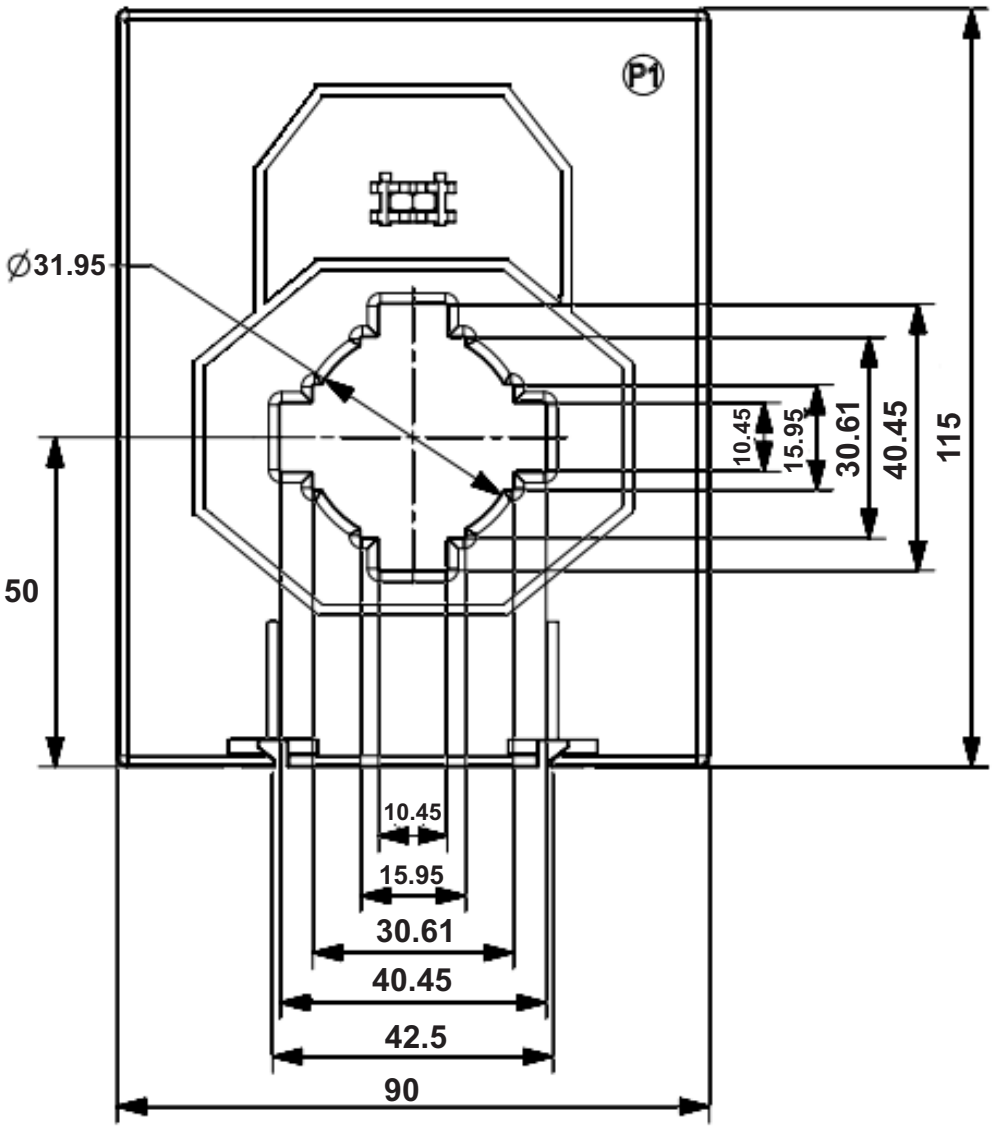
70x 30 mm Model Dimensions:	Transformer width: 70 mm Transformer height: 92 mm Transformer depth: 44 mm	Bus bar: 30x10 mm Round conductor: 28 mm

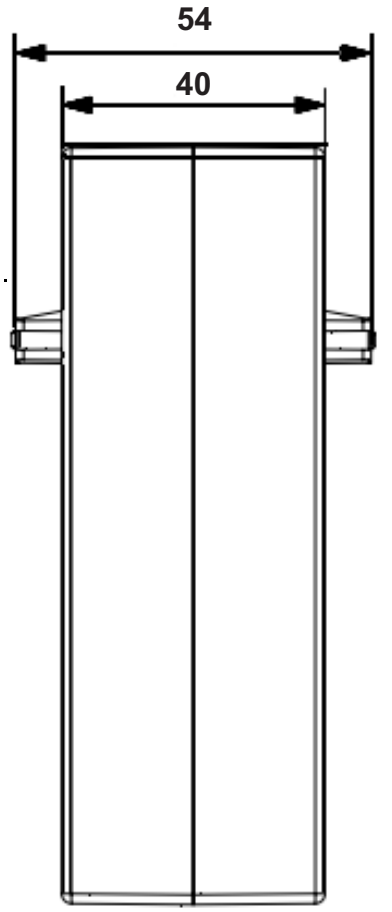


90x40 mm Model Dimensions:

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

Bus bar: 30x10 mm
Round conductor: 31.5 mm





Theta CT, CT with Transducer options:

Types of Theta CT	Primary Current (A AC)	Current Output (mA DC)
Theta CT 70x30mm (RMS or Average)	50	4....20mA/ 0...20 mA DC
	100	
	150	
	200	
	250	
	300	
Theta CT 90 x 40 mm (RMS or Average)	150	4....20mA/ 0...20 mA DC
	200	
	250	
	300	
	400	
	500	
	600	
	750	

How to Connection:

Theta CT comes with spring loaded connectors. Insert the screw driver in square shaped connector sockets and insert the wire in adducent round hole and then remove the screw driver. Clamp inside the connector will hold the conductor of wire.

Mounting

various mounting options like wall mounting, cable mounting, bas bar mounting, DIN rail mounting are available.

a) For mounting on bus bar use M4 screws and nuts to fit on busbar.

b) DIN rail slots are provided on Theta CT

c) For wall mounting use self lifting clamp strap provided with Theta CT

Scope of supply:

1) Theta CT 1 No.s
2) Test Certificate 1 No.s
3) M4 screws and nut 2 No.s
4) Self lifting clamp strap: 2 No.s
5) Operating Instruction manual.

NOTE

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