



ELECMAT TECHNOLOGY CO., LTD.

Sheet 1 of 5

Released Date :

Product Name : **Split-Core Current Transformer**

EM P/N : **EICT-90K-T501C**

Version: **ud01**

Customer P/N :

Application : **Energy measurement unit**

Version History

Version	Change Description	Originator	Effective Date
01	Preliminary	Carter.He	16.10.2018

Under development!

EM Approved

Created/Date	Approved/Date	Released/Date
<i>Carter.He 16.10.2018</i>		

Customer Approved

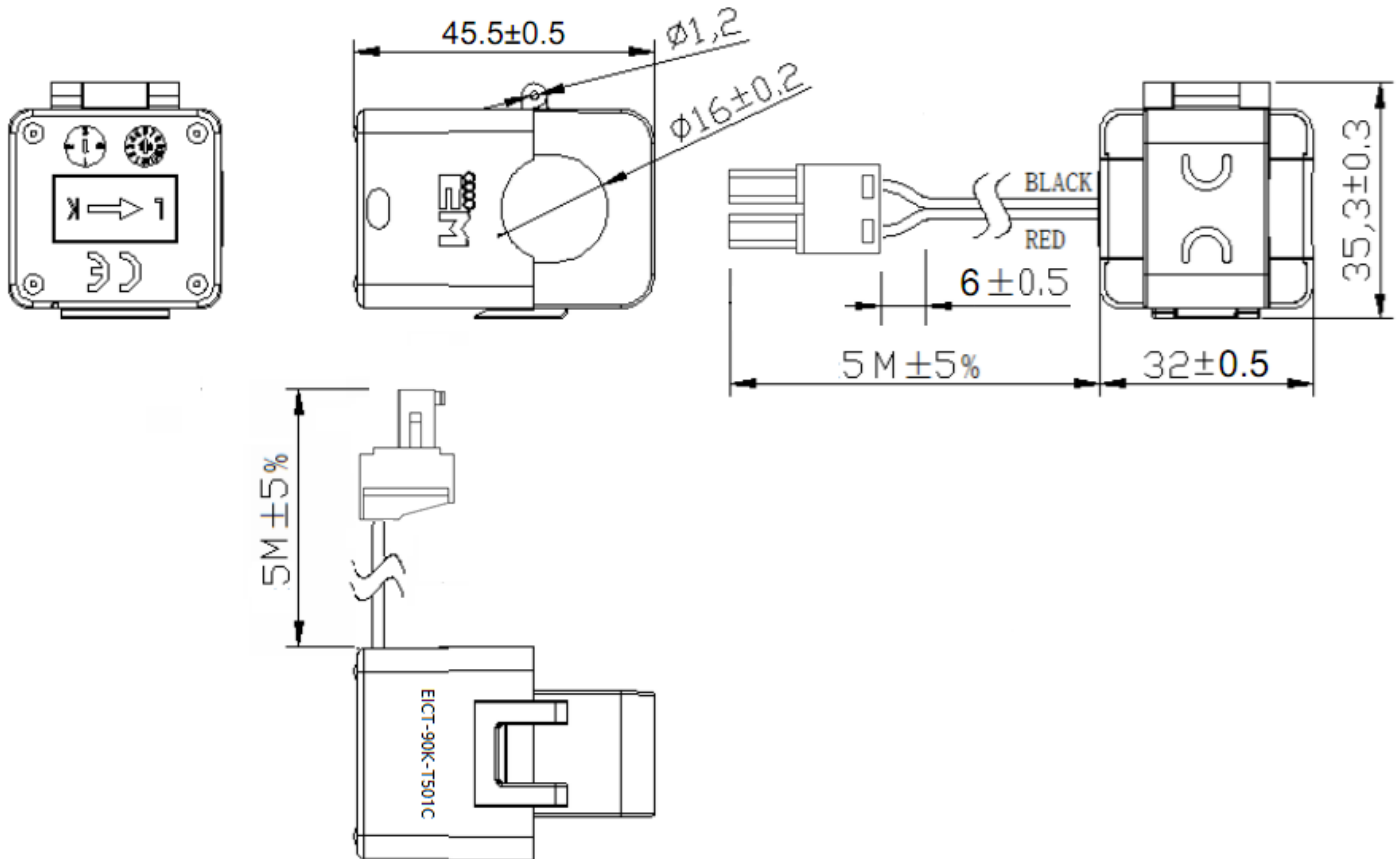
Approved/Date



ELECTMAT TECHNOLOGY CO., LTD.

Sheet 2 of 5

## 1. Dimensions &amp; Electrical Data: (dimensions unit in mm)

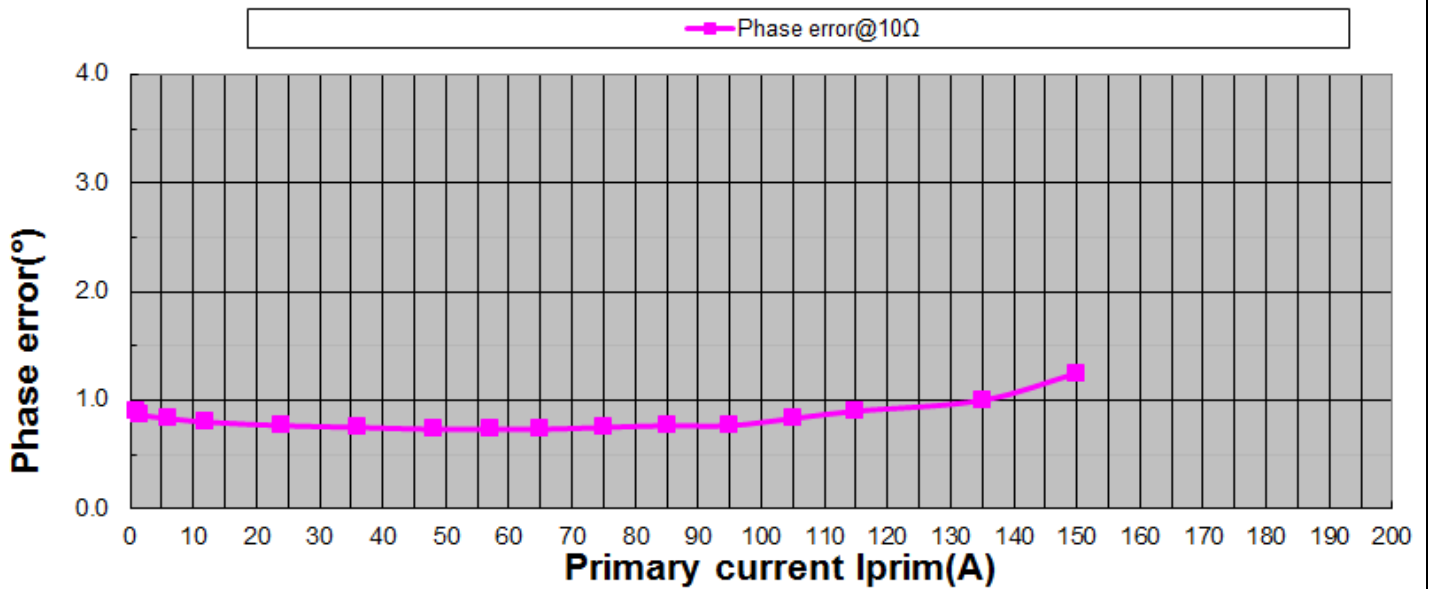


Electrical Data(typical values):				
$I_{pn} = 90 \text{ A}$	Primary nominal rms current			
$I_{out} = 90 \text{ mA}$	Output current @ $I_{pn}$			
$\varphi = 1.5^\circ \text{ Max @ } I_{pn}, 25^\circ\text{C}, R_b=10\Omega$	Max Phase error @ $I_{pn}, 25^\circ\text{C}, \text{Burden resistance}=10\Omega$			
$F(I) = 1\% \text{ Max @ } I_{pn}, 25^\circ\text{C}, R_b=10\Omega$	Max Amplitude error @ $I_{pn}, 25^\circ\text{C}, \text{Burden resistance}=10\Omega$			
$R_b = 10 \Omega$	Burden resistance			
$U_{p,eff} = 4 \text{ kV}, 2 \text{ S}$	Isolated voltage, isolated with plastic case.			
$N_2=1000\pm 1\% \text{ Turns}$	Number of turns of secondary winding			
$R_{\Omega 2}$	Winding resistance of secondary winding at $25^\circ\text{C}$			
Connections: red+black wire 2x24AWG	Connexion wires of secondary winding			
ambient temperature: $-25^\circ\text{C} \dots +70^\circ\text{C}$				
storage temperature: $-25^\circ\text{C} \dots +85^\circ\text{C}$				

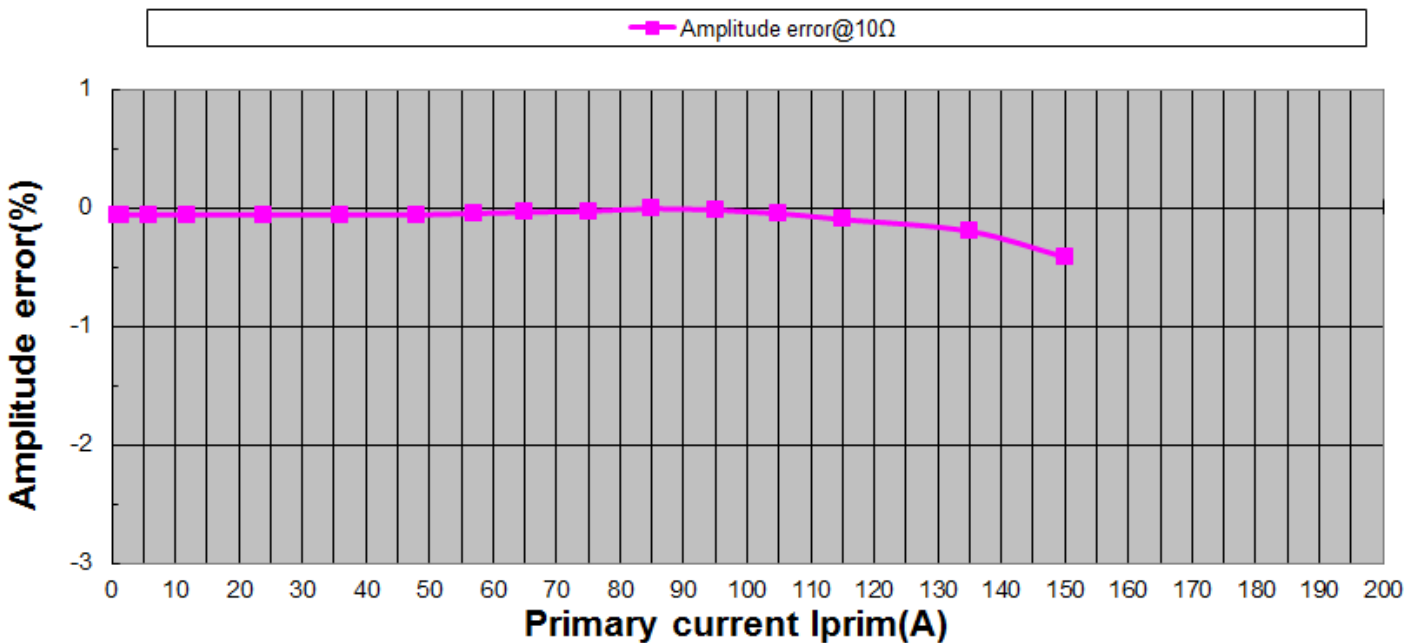


## 2. Phase Errors & Amplitude Errors

### Phase errors vs burden resistance $R_b$ (@25°C, typical values)



### Amplitude errors vs burden resistance $R_b$ (@25°C, typical values)





### 3. Material List

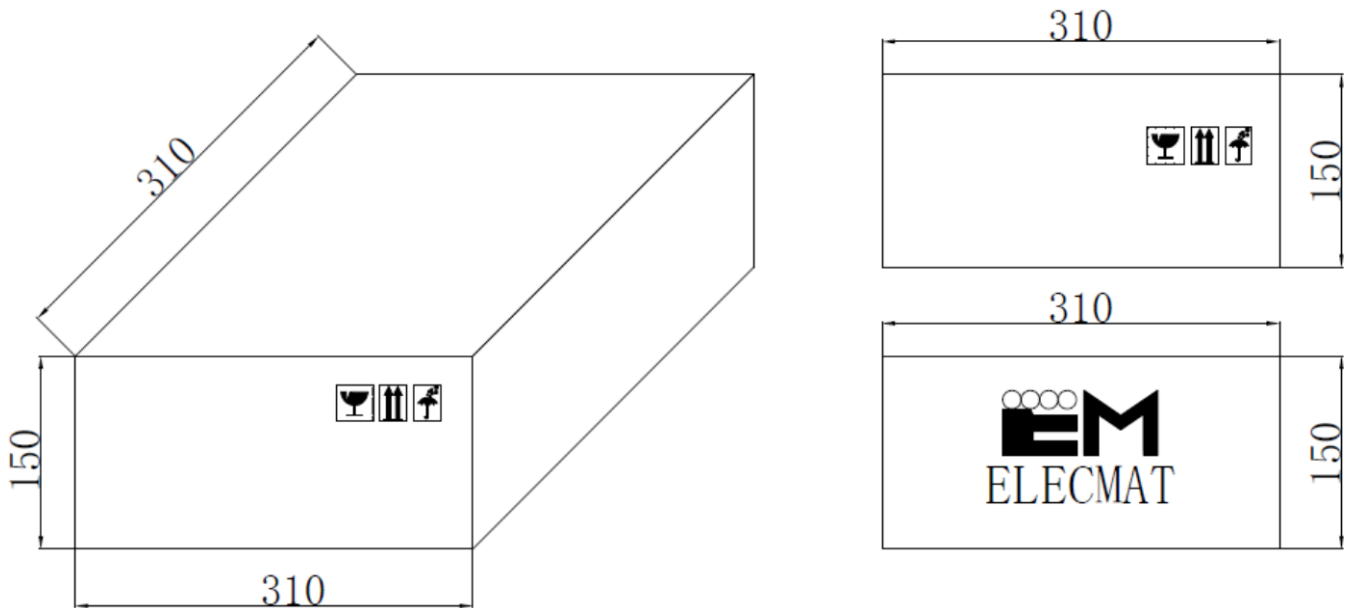
NO.	ITEM	SUPPLIER/(VENDOR)	MATERIAL	UL NO.
1	CORE	TDG	FIRRITE	NA
2	COPPER WIRE	DONGGUANG YIDA INDUSTRIAL CO.LTD GUANGZHOU WANBAO ENAMELLED WIRE CO. LTD	POLYURETHANE ENAMELLED	E344055 E167402
3	INSULATION TAPE	3M COMPANY ELECTRICAL PRODUCTS DIV	FLAME RETARDANT POLYESTER FILM INSULATING TAPE	E256906
4	RUBBER	TIAN MU	RTV SILICONE RUBBER	NA
5	LEAD WIRE	3Q WIRE&CABLE CO.,LTD	UL2464 300V 80°C	E492980
6	PLASTIC CASE	SHENZHEN DEFA SCIENCE CO.,LTD	PPO	E45329
7	TERMINAL	SHENZHEN CONNECTION ELECTRONICS CO.,LTD	PLTB1.5-02-B-3.5 Terminals	NA



ELECMAT TECHNOLOGY CO., LTD.

Sheet 5 of 5

#### 4. Packing Information



- Box size: 310\*310\*150 mm
- Qty per box: 36PCs
- Gross weight: 4.6kg
- Net weight: 3.7kg