



ELECMAT TECHNOLOGY CO., LTD.

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Released Date :

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

EM P/N : **EICT-90K-T500C**

Version: 01

Customer P/N :

Application : **Energy measurement unit**

Version History

Version	Change Description	Originator	Effective Date
01	Preliminary	Tim.C	15.03.2018

Under development!

EM Approved

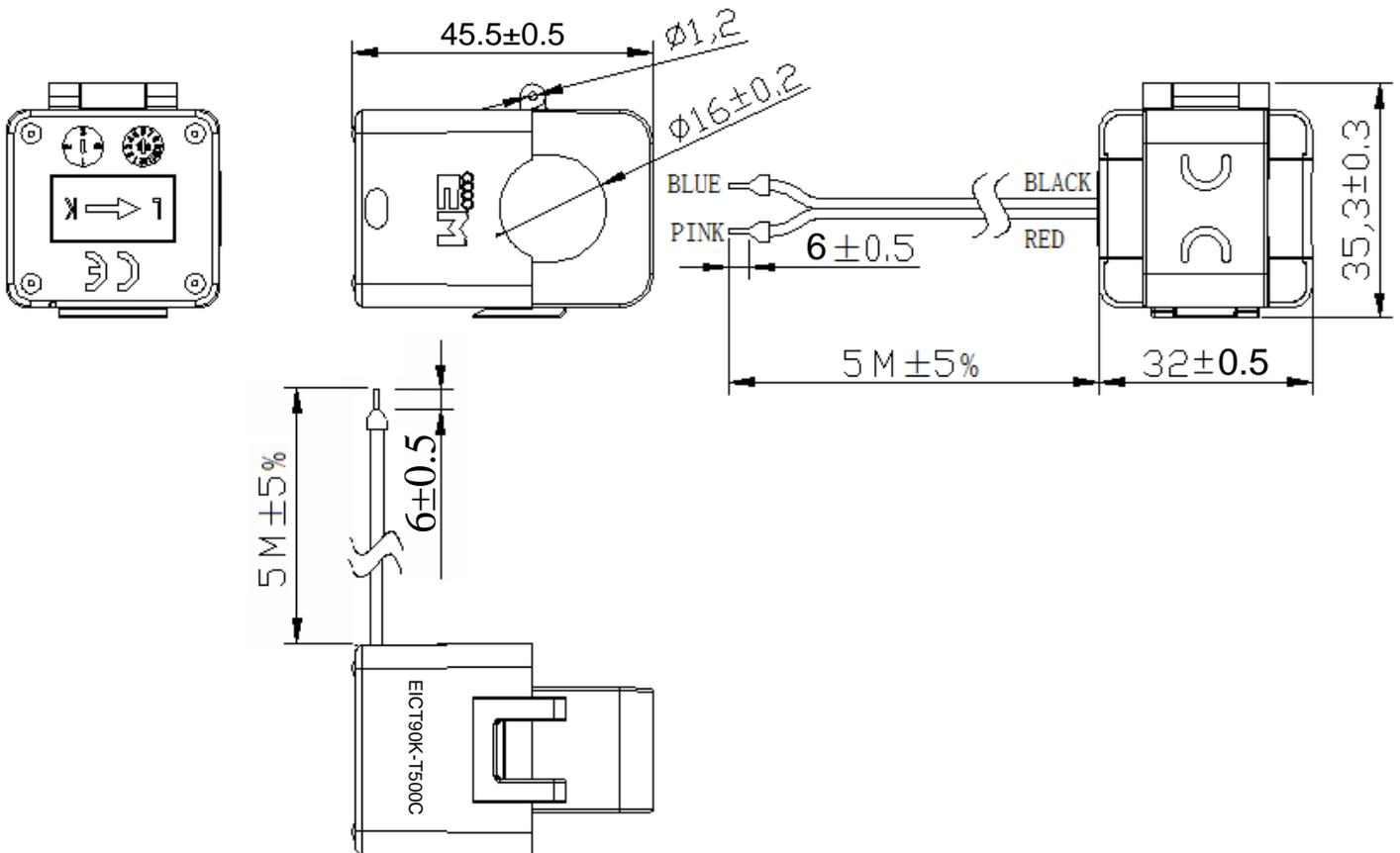
Created/Date	Approved/Date	Released/Date
<i>Tim.C 09.04.2018</i>		

Customer Approved

Approved/Date



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

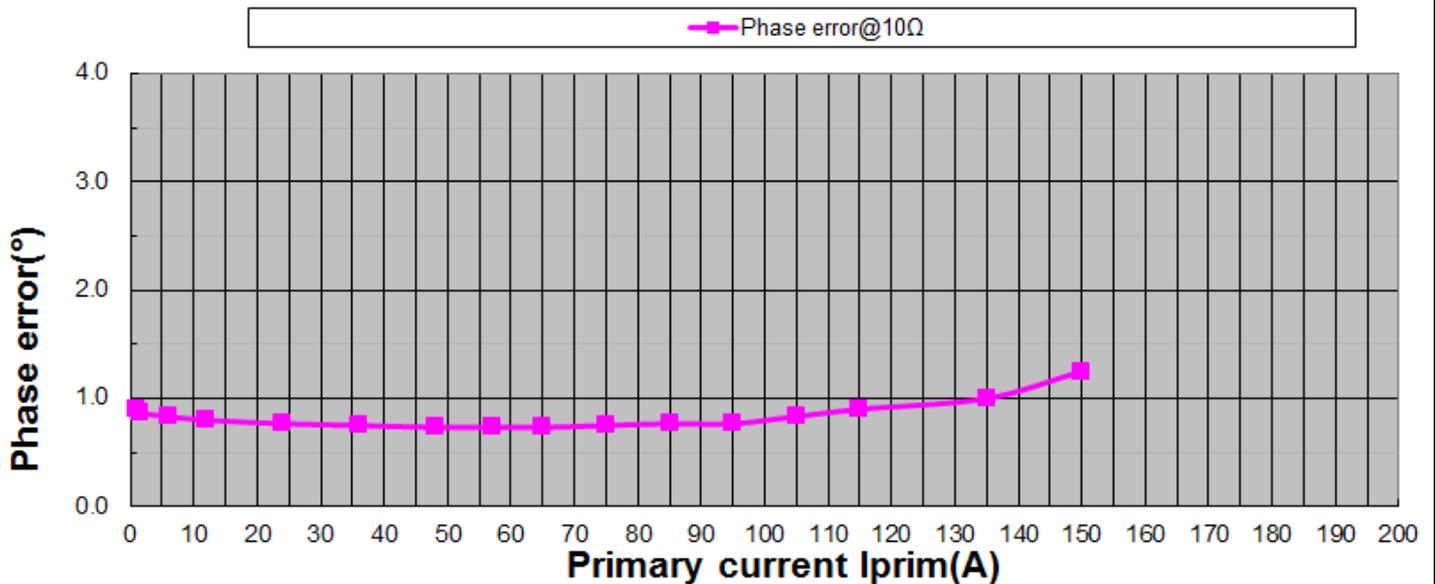


Electrical Data(typical values):	
$I_{pn} = 90 \text{ A}$	Primary nominal rms current
$I_{out} = 45 \text{ mA}$	Output current @ I_{pn}
$\varphi = 1.5^\circ \text{ Max @ } I_{pn}, 25^\circ \text{C}, R_b=10\Omega$	Max Phase error @ $I_{pn}, 25^\circ \text{C}, \text{Burden resistance}=10\Omega$
$F(I) = 1\% \text{ Max @ } I_{pn}, 25^\circ \text{C}, R_b=10\Omega$	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.
$N_2=2000\pm1\% \text{ Turns}$	Number of turns of secondary winding
$R_{Cu2} = 155\Omega\pm5\%$	Winding resistance of secondary winding at 25°C
Connections: red+black wire 2x24AWG	Connexion wires of secondary winding
ambient temperature: $-25^\circ \text{C} \dots +70^\circ \text{C}$	
storage temperature: $-25^\circ \text{C} \dots +85^\circ \text{C}$	

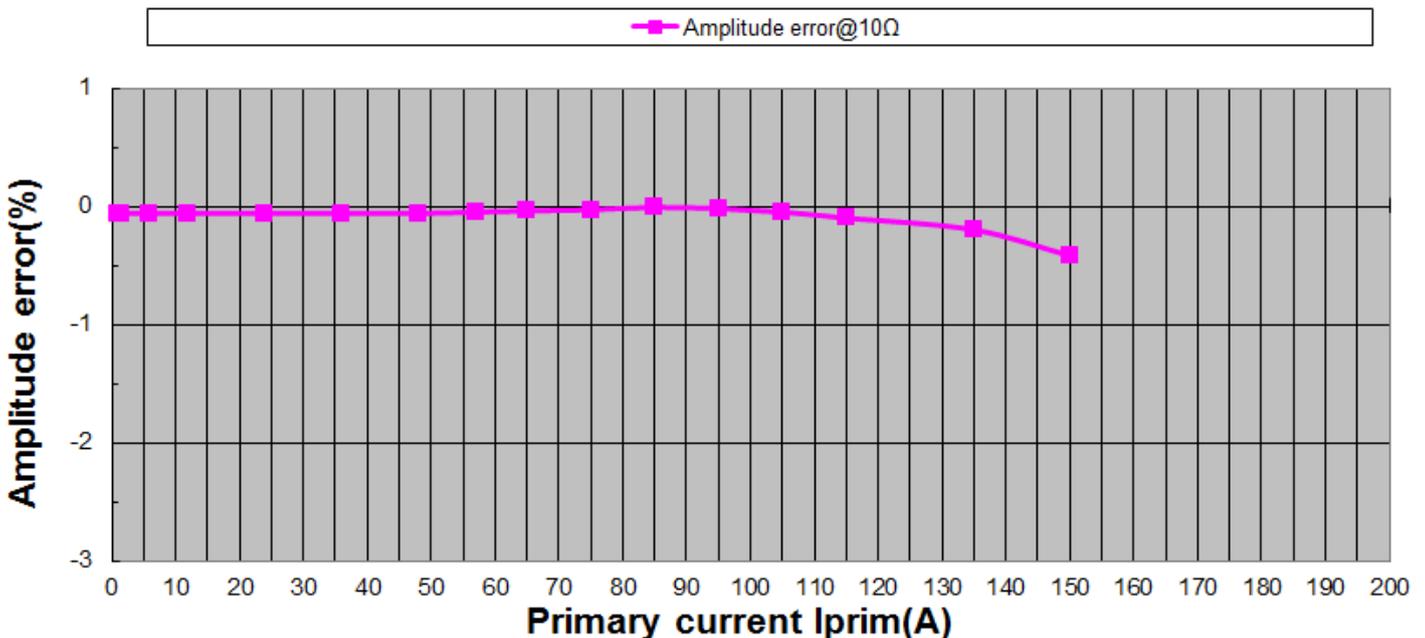


2. Phase Errors & Amplitude Errors

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

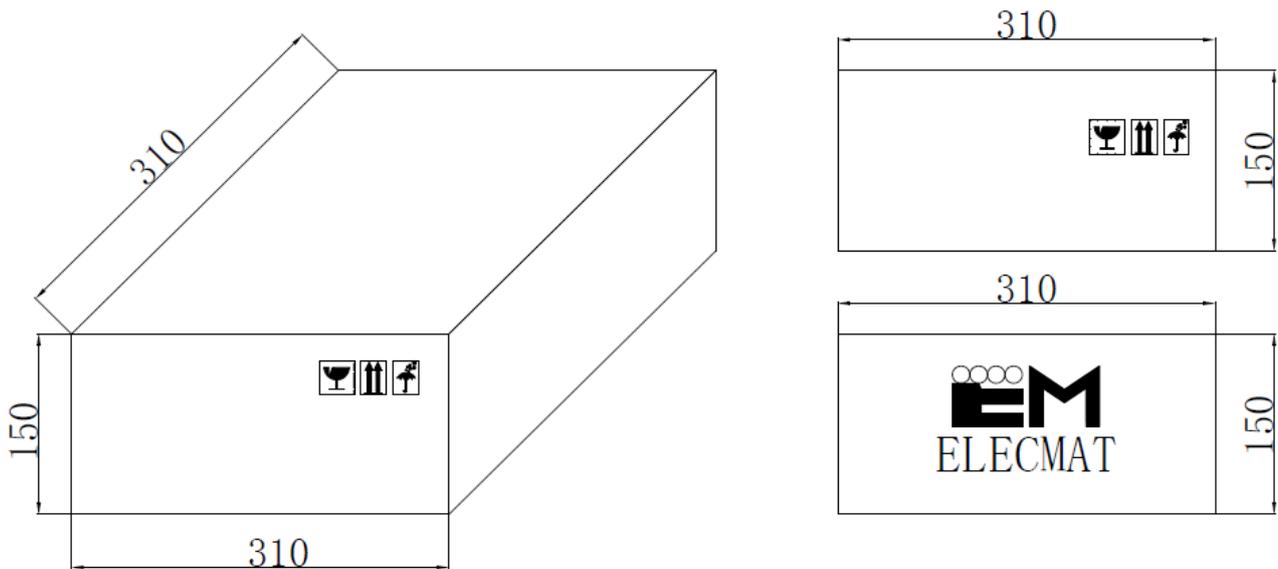
NO.	ITEM	SUPPLIER/(VENDOR)	MATERIAL	UL NO.
1	CORE	TDG	FERRITE	NA
2	COPPER WIRE	DONGGUANG YIDA INDUSTRIAL CO.LTD GUANGZHOU WANBAO ENAMELLED WIRE CO. LTD	POLYURETHANE ENAMELLED	E344055 E167402
3	INSULATION TAPE	3M COMPANY ELECTRICAL PRODUCTS DIV	FLAME RETARDANT POLYESTER FILM INSULATING TAPE	E256906
4	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	SUZHOU WIN JOY ELECTRONIC TECHNOLOGY CO.,LTD	E0308-PINK-BLUE Terminals	NA



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4. Packing Information



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