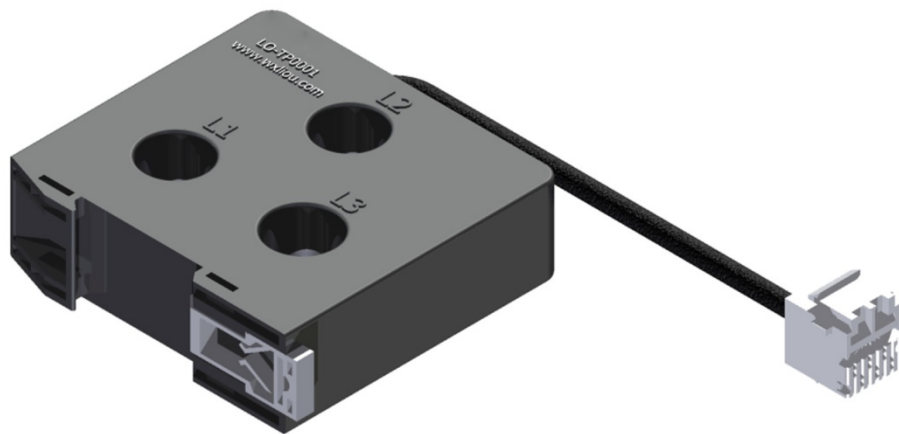




Skype: lioutronics@126.com  
 Whatsapp: 15371097096  
 E-mail: lioutronics@126.com



**Description**

- ◆ 50/60 Hz, Three- Phase, AC Current Sensor
- ◆ Dynamic Range from 10A to 100Amps
- ◆ Meets IEC62053-21 class 1
- ◆ Meets IEC 60044-1 class 0.1 Phase error < 5'
- ◆ Very low temperature coefficient
- ◆ Meets UL class B (130°C) thermal insulation system
- ◆ Meets UL 94V-0
- ◆ AC isolation resistance: 4KV for 60s
- ◆ Max. operation voltage: AC660V



**Application**

- Electricity meter
- Recording
- Power monitoring
- Energy management
- Alternative energy monitoring

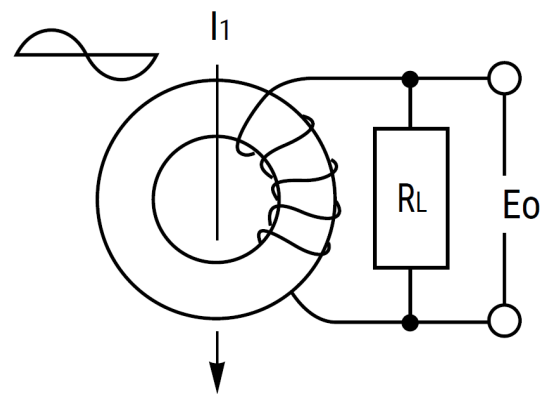
ELECTRIC SPECIFICATION AT 25°C									
Model number	Turns Ration	I <sub>pri</sub> <sup>4</sup>	I <sub>out</sub> <sup>5</sup>	I <sub>primax</sub> <sup>6</sup>	I <sub>outmax</sub> <sup>7</sup>	Accuracy Class <sup>3</sup>	R <sub>L</sub> <sup>8</sup>	Weight	Frequency range
		Amps	mA	Amps	mA		Ohms		
<b>LO-TP0001</b>	1:2000	10	5	180	90	0.1	20		50-60

**Note:**

1. Output voltage is proportional to the derivative(di/dt)of the input current based on the Rogowski Coil principle.
2. All current and voltages assumed to be sinusoidal waveforms at Fr, the constant rated frequency in Hz, measured as RMS value.
3. Accuracy class per IEC60044-1Table 11.
4. I<sub>pri</sub>=Rated primary current.
5. I<sub>out</sub>=Rated secondary current.
6. I<sub>primax</sub>=Sensed max primary current.
7. I<sub>outmax</sub>=Sensed max secondary current.
8. R<sub>L</sub>=Terminating resistance. Varying terminating resistance increases or decreases output Voltage /Amps according to following equation  $R_L = V_{out} * N_{sec} / I_{pri}$

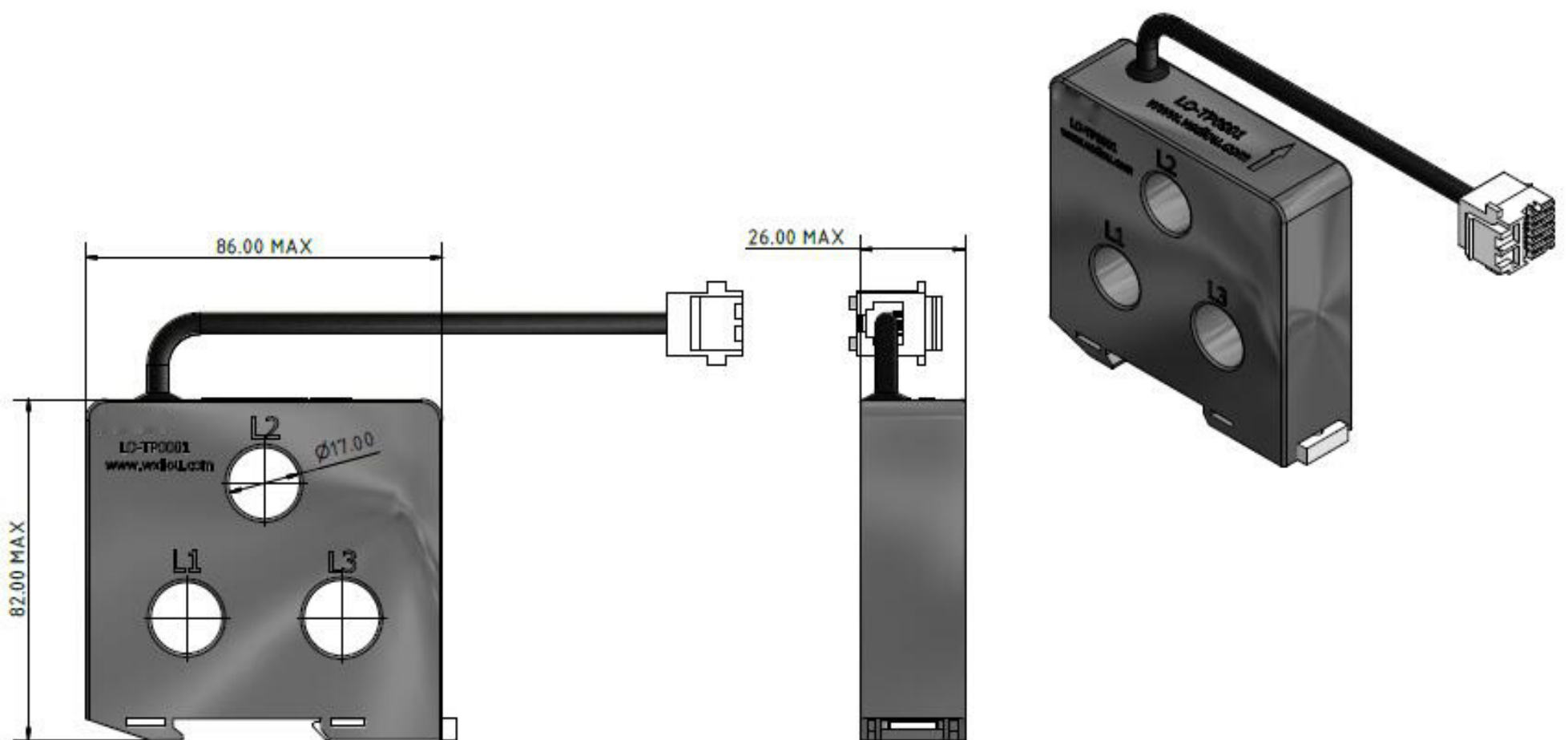
ABSOLUTE MAXIMUM RATINGS	
Operating free air temperature range	-40°C to 85°C
Storage temperature range	-40°C to 100°C
LEADS INFORMATION	
UL2649 24AWG BLACK	150CM ± 10MM
Terminal block	RJ11 terminal

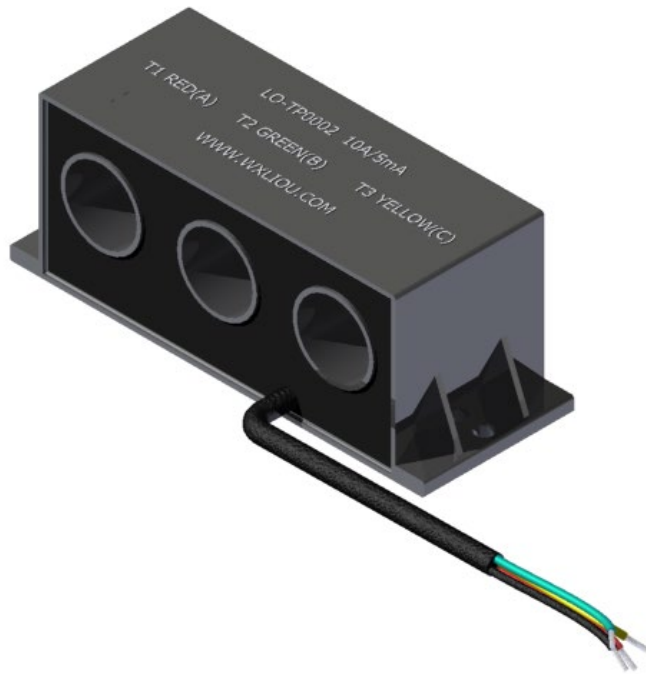
## Measuring Circuit



$I_1$  : Primary current (AT)  
 $R_L$  : Load resistance ( $\Omega$ )  
 $E_o$  : Output voltage ( $mV_{rms}$ )

## Mechanical Specifications





### Description

- ◆ 50/60 Hz, Three- Phase, AC Current Sensor
- ◆ Dynamic Range from 10A to 100Amps
- ◆ Meets IEC62053-21 class 1
- ◆ Meets IEC 60044-1 class 0.1 Phase error < 5'
- ◆ Very low temperature coefficient
- ◆ Meets UL class B (130°C) thermal insulation system
- ◆ Meets UL 94V-0
- ◆ AC isolation resistance: 4KV for 60s
- ◆ Max. operation voltage: AC660V

### Application

- Electricity meter
- Recording
- Power monitoring
- Energy management
- Alternative energy monitoring

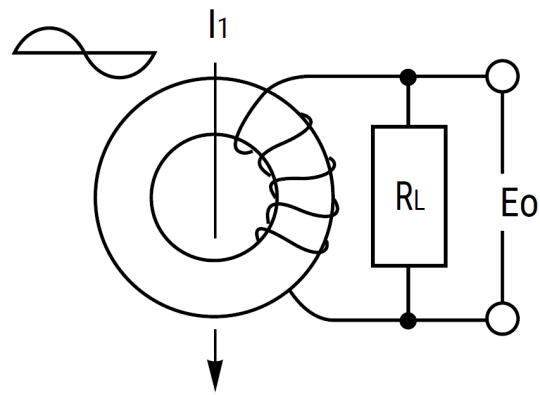
ELECTRIC SPECIFICATION AT 25°C									
Model number	Turns Ration	I <sub>pri</sub> <sup>4</sup>	I <sub>out</sub> <sup>5</sup>	I <sub>primax</sub> <sup>6</sup>	I <sub>outmax</sub> <sup>7</sup>	Accuracy Class <sup>3</sup>	R <sub>L</sub> <sup>8</sup>	Weight	Frequency range
		Amps	mA	Amps	mA		Ohms		
LO-TP0002	1:2000	10	5	160	80	0.1	20		50-60

**Note:**

1. Output voltage is proportional to the derivative(di/dt)of the input current based on the Rogowski Coil principle.
2. All current and voltages assumed to be sinusoidal waveforms at Fr, the constant rated frequency in Hz, measured as RMS value.
3. Accuracy class per IEC60044-1Table 11.
4. I<sub>pri</sub>=Rated primary current.
5. I<sub>out</sub>=Rated secondary current.
6. I<sub>primax</sub>=Sensed max primary current.
7. I<sub>outmax</sub>=Sensed max secondary current.
8. R<sub>L</sub>=Terminating resistance. Varying terminating resistance increases or decreases output Voltage /Amps according to following equation R<sub>L</sub>=V<sub>out</sub>\*Nsec/I<sub>pri</sub>

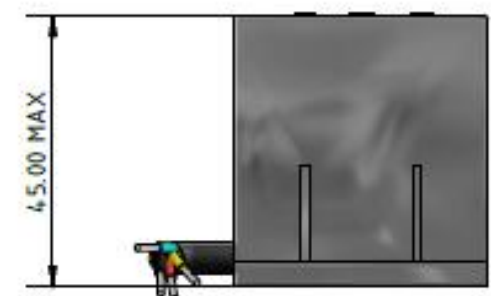
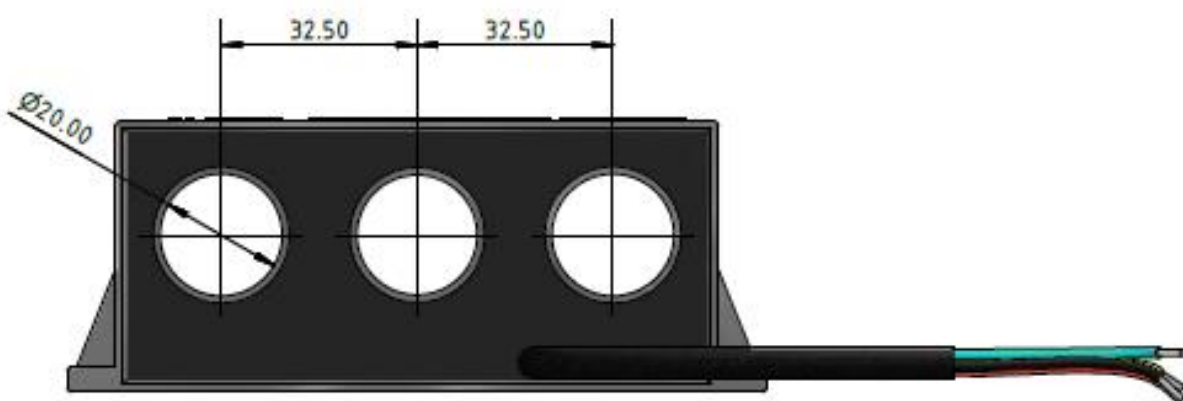
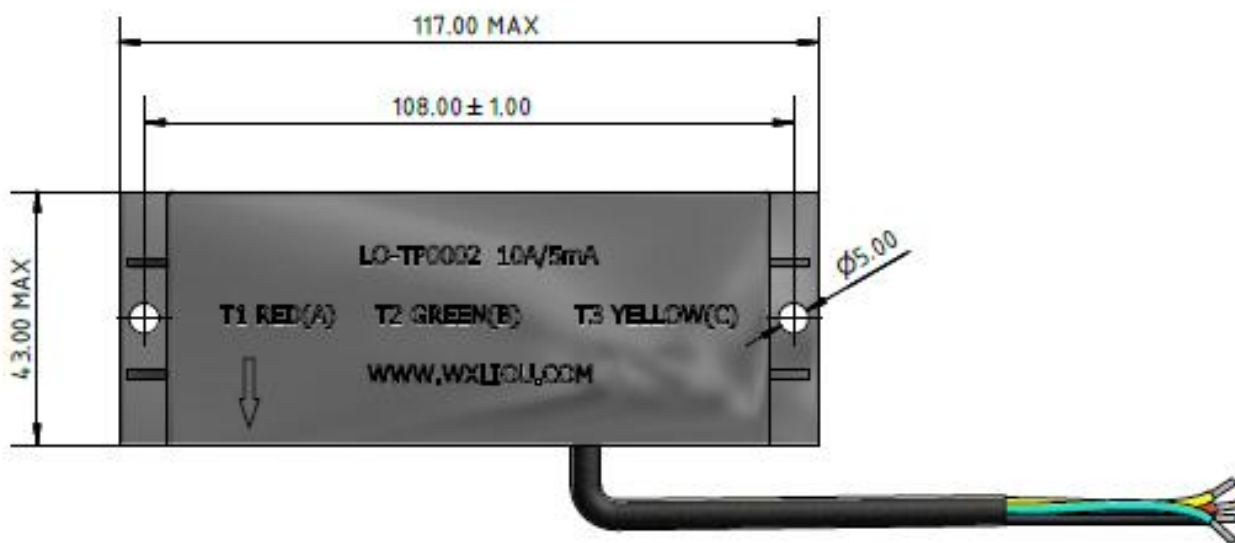
ABSOLUTE MAXIMUM RATINGS	
Operating free air temperature range	-40°C to 85°C
Storage temperature range	-40°C to 100°C
LEADS INFORMATION	
UL2649 22AWG BLACK	150CM ± 10MM

## Measuring Circuit

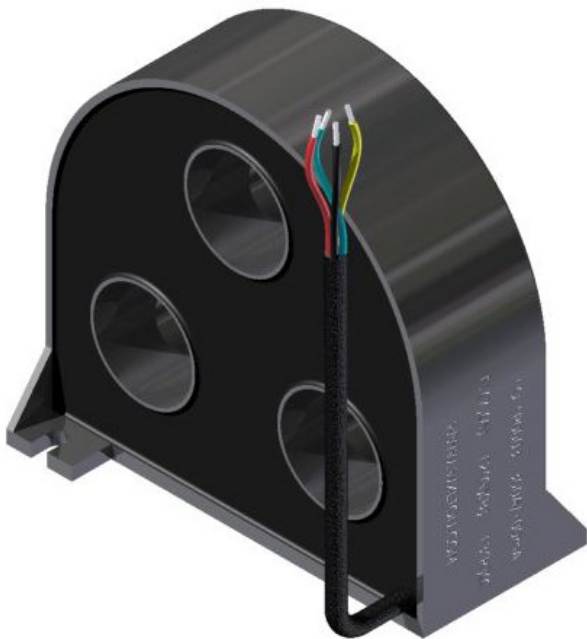


- $I_1$  : Primary current (AT)
- $R_L$  : Load resistance ( $\Omega$ )
- $E_o$  : Output voltage ( $mV_{rms}$ )

## Mechanical Specifications



# Three-phase current transformers



## Description

The range of LiOu Instruments MC-III current transformers offers wide system current ratings, apertures, bus bar and case sizes to suit every application.

Manufactured to meet EN60044 the range benefits include ratio rating from 10A to 300A, accuracy up to Class 0.5, integral terminal cover for safety and multiple mounting options.

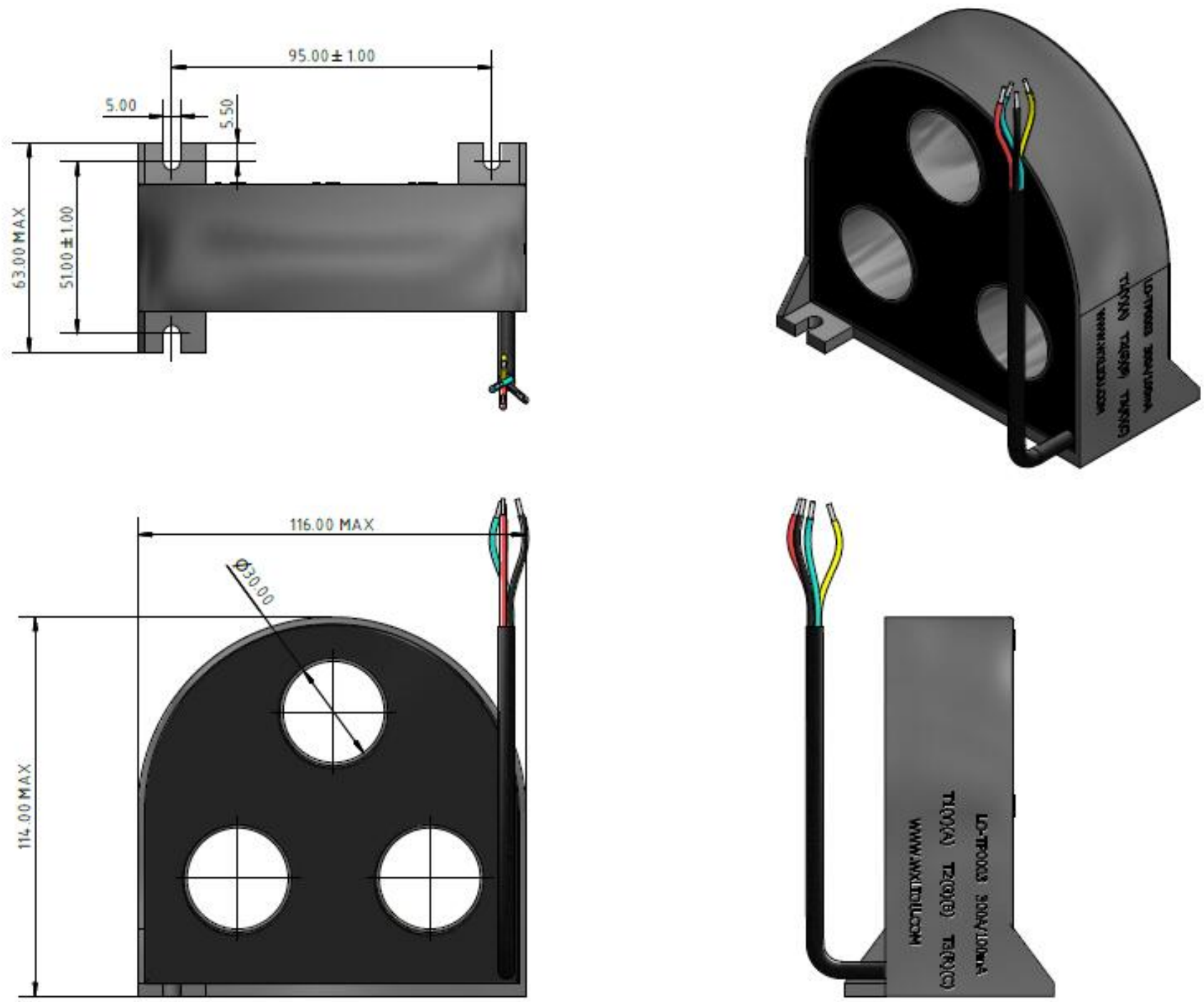
## Application

- Data logging
- Recording
- Power monitoring
- Energy management
- Alternative energy monitoring
- Cost allocation

## Features

- Frequency Range: 50-60Hz
- Over Load withstand: 1.2 x rated current continuously
- AC isolation resistance: 3KV for 60s
- Rigid housing case with UL® 94V-0 polycarbonate
- Safety standard: IEC/EN60044-1
- Nominal phase angle error and  
Nominal linearity error: Conform IEC61869-2  
Conform IEC60044-1
- Max. operation voltage: AC660V
- Thermal Insulation Class: Class B
- IP Protection Class: IP20B
- Humidity: Up to 95%RH (Non-condensing)

## Mechanical Specification



## Electric Specification

### ELECTRIC SPECIFICATION AT 25°C

Model number	Turns Ration	$I_{pri}^4$	$I_{out}^5$	$I_{primax}^6$	$I_{outmax}^7$	Accuracy Class <sup>3</sup>	$R_L^8$	Weight	Frequency range
		Amps	mA	Amps	mA		Ohms		
<b>LO-TP0003</b>	1:3000	300	100	360	120	0.1	20		50-60

### ABSOLUTE MAXIMUM RATINGS

Operating free air temperature range	-20°C to 65°C
Storage temperature range	-20°C to 85°C

## Three-phase current transformers



### Description

The range of LiOu three-phase current transformers offers wide system current ratings, apertures, bus bar and case sizes to suit every application. Manufactured to meet EN60044 the range benefits include ratio rating from 100A to 6300A, accuracy up to Class 0.5, integral terminal cover for safety and multiple mounting options.

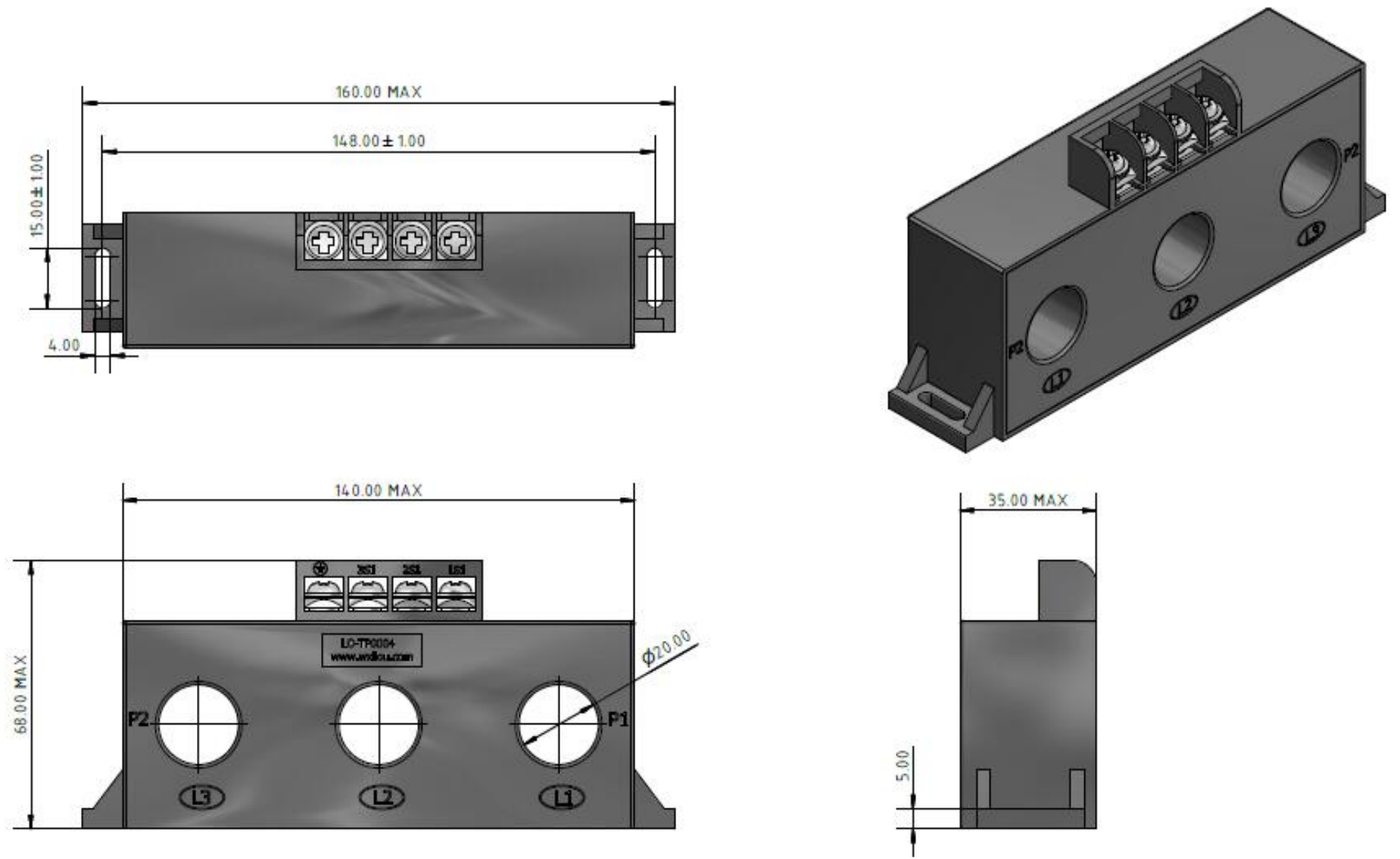
### Application

- Data logging
- Recording
- Power monitoring
- Energy management
- Alternative energy monitoring
- Cost allocation

### Features

- Frequency Range: 50-60Hz
- Over Load withstand: 1.2 x rated current continuously
- AC isolation resistance: 3KV for 60s
- Rigid housing case with UL® 94V-0 polycarbonate
- Safety standard: IEC/EN60044-1
- Nominal phase angle error and  
Nominal linearity error: Conform IEC61869-2  
Conform IEC60044-1
- Max. operation voltage: AC660V
- Thermal Insulation Class: Class B
- IP Protection Class: IP20B
- Humidity: Up to 95%RH (Non-condensing)

## Mechanical Specification



## Electric Specification

P/N	Rated ratio	Rated power ( $S_n$ ) at different Accuracy Class		Short-time thermal( $I_{th}$ )	Primary Turns	Weight (about)
		Class 1				
	A/A	VA		A	T	kg
LO-TP0004	100/5	2.5		60xlp	1	0.5

ABSOLUTE MAXIMUM RATINGS	
Operating free air temperature range	-20°C to 85°C
Storage temperature range	-20°C to 60°C



For full details go to  
www.wxliou.com

### Description

- ◆ 50/60 Hz, Three- Phase, AC Current Sensor
- ◆ Dynamic Range from 100A to 200Amps
- ◆ Nominal phase angle error and  
Nominal linearity error: Conform IEC61869-2  
Conform IEC60044-1
- ◆ Very low temperature coefficient
- ◆ Meets UL class B (130°C) thermal insulation system
- ◆ Meets UL 94V-0
- ◆ AC isolation resistance: 4KV for 60s

### Application

- Electricity meter
- Recording
- Power monitoring
- Energy management
- Alternative energy monitoring

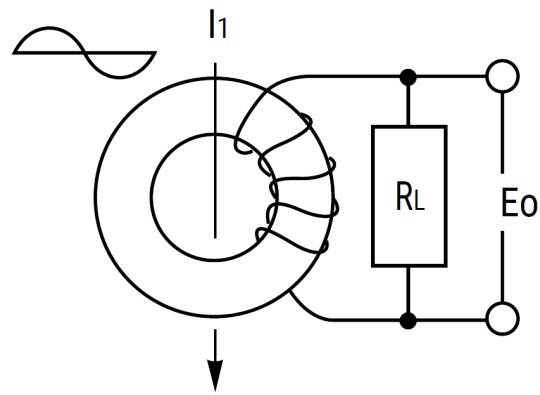
ELECTRIC SPECIFICATION AT 25°C									
Model number	Turns Ration	I <sub>pri</sub> <sup>4</sup>	I <sub>out</sub> <sup>5</sup>	I <sub>primax</sub> <sup>6</sup>	I <sub>outmax</sub> <sup>7</sup>	Accuracy Class <sup>3</sup>	R <sub>L</sub> <sup>8</sup>	Weight	Frequency range
		Amps	mA	Amps	mA		Ohms		
LO-TP0005	1:2000	100	50	200	100	0.1	20	370	50-60

**Note:**

1. Output voltage is proportional to the derivative(di/dt)of the input current based on the Rogowski Coil principle.
2. All current and voltages assumed to be sinusoidal waveforms at Fr, the constant rated frequency in Hz, measured as RMS value.
3. Accuracy class per IEC60044-1 Table 11.
4. I<sub>pri</sub>=Rated primary current.
5. I<sub>out</sub>=Rated secondary current.
6. I<sub>primax</sub>=Sensed max primary current.
7. I<sub>outmax</sub>=Sensed max secondary current.
8. R<sub>L</sub>=Terminating resistance. Varying terminating resistance increases or decreases output Voltage /Amps according to following equation  $R_L = V_{out} * N_{sec} / I_{pri}$

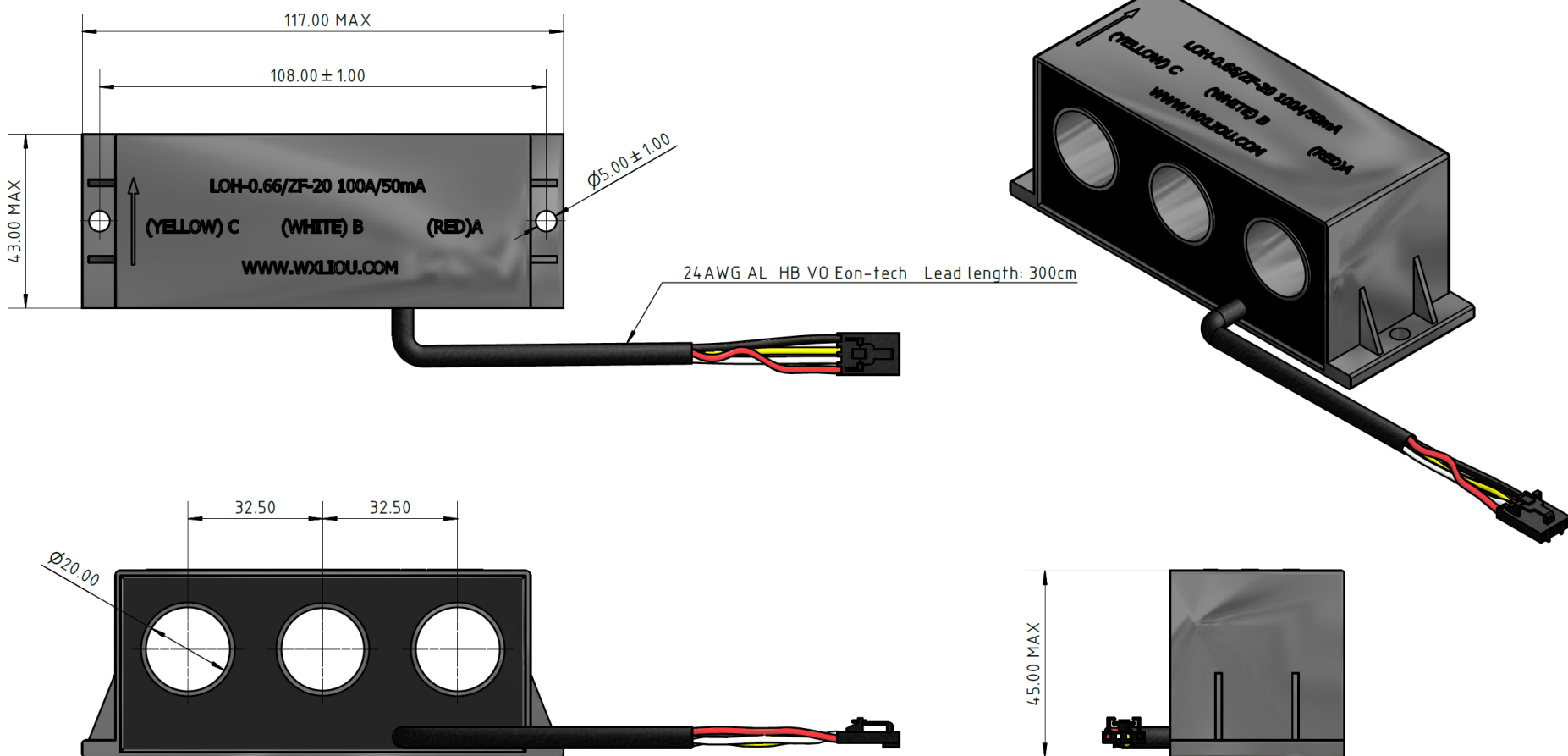
ABSOLUTE MAXIMUM RATINGS	
Operating free air temperature range	-40°C to 60°C
Storage temperature range	-40°C to 80°C
LEADS INFORMATION	
24AWG BLACK Eon-tech	300CM ± 20mm

## Measuring Circuit



$I_1$  : Primary current (AT)  
 $R_L$  : Load resistance ( $\Omega$ )  
 $E_o$  : Output voltage ( $mV_{rms}$ )

## Mechanical Specifications





**Description**

- ◆ 50/60 Hz, Three- Phase, AC Current Sensor
- ◆ Dynamic Range from 10A to 100Amps
- ◆ Nominal phase angle error and  
Nominal linearity error: Conform IEC61869-2  
Conform IEC60044-1
- ◆ Very low temperature coefficient
- ◆ Meets UL class B (130°C) thermal insulation system
- ◆ Meets UL 94V-0
- ◆ AC isolation resistance: 4KV for 60s

**Application**

- Electricity meter
- Recording
- Power monitoring
- Energy management
- Alternative energy monitoring

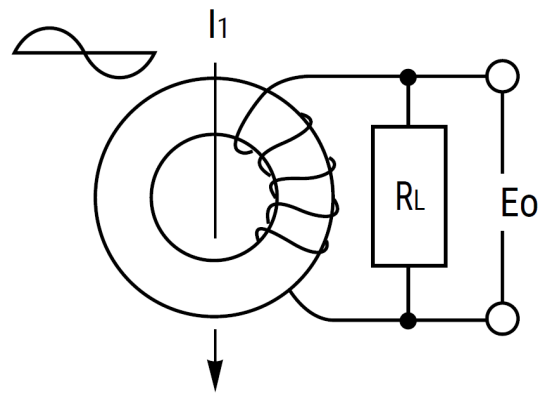
ELECTRIC SPECIFICATION AT 25°C									
Model number	Turns Ration	I <sub>pri</sub> <sup>4</sup>	I <sub>out</sub> <sup>5</sup>	I <sub>primax</sub> <sup>6</sup>	I <sub>outmax</sub> <sup>7</sup>	Accuracy Class <sup>3</sup>	R <sub>L</sub> <sup>8</sup>	Weight	Frequency range
		Amps	mA	Amps	mA		Ohms		
LO-TP0006	1:2000	10	5	20	10	0.1	20	310	50-60

**Note:**

1. Output voltage is proportional to the derivative(di/dt)of the input current based on the Rogowski Coil principle.
2. All current and voltages assumed to be sinusoidal waveforms at Fr, the constant rated frequency in Hz, measured as RMS value.
3. Accuracy class per IEC60044-1 Table 11.
4. I<sub>pri</sub>=Rated primary current.
5. I<sub>out</sub>=Rated secondary current.
6. I<sub>primax</sub>=Sensed max primary current.
7. I<sub>outmax</sub>=Sensed max secondary current.
8. R<sub>L</sub>=Terminating resistance. Varying terminating resistance increases or decreases output Voltage /Amps according to following equation  $R_L = V_{out} * N_{sec} / I_{pri}$

ABSOLUTE MAXIMUM RATINGS	
Operating free air temperature range	-40°C to 40°C
Storage temperature range	-40°C to 60°C
LEADS INFORMATION	
22AWG 2464 BLACK	300CM ± 20mm

## Measuring Circuit



$I_1$  : Primary current (AT)  
 $R_L$  : Load resistance ( $\Omega$ )  
 $E_o$  : Output voltage ( $mV_{rms}$ )

## Mechanical Specifications

