

- **Compact transformer**

Low Voltage level output

- **Fast opening/closing without tool**

No secondary open-circuit problem.

- **Available for currents from 10A to 500A**

Passage hole diameter: 8, 12, 17, 24 and 36mm

- **calibrated output voltage**

500mV ac



The "Tio" split-core transformer were a low cost solution to monitoring electrical circuits. The unique hinge and locking hook allows to instrument a circuit without interrupting the primary current.

applications:

- Retrofitting existing site without instrumentation.
- Diagnosis, management and energy optimization
- Monitoring and analysis of electrical networks.

Electrical meters associated:

CPL165 : http://www.loreme.fr/fichtech/CPL165_eng.pdf

CPL105 : http://www.loreme.fr/fichtech/CPL105_eng.pdf

Threshold relay associated:

signle phase, **DSL35LCA** : http://www.loreme.fr/fichtech/DSL35LCA_eng.pdf

Tree-phase, **RCL105** : http://www.loreme.fr/fichtech/RCL105_eng.pdf

Features:

- transformer encapsulated in isolated plastic housing.
- Closing with safety lock to clip.
- Output connection with twisted cable.
- Protection rating (enclosure): IP40
- Available model:

- diameter 8mm (10A...30A maxi)
- diameter 12mm (30A...90A maxi)
- diameter 17mm (90A...160A maxi)
- diameter 24mm (160A...250A maxi)
- diameter 36mm (250A...500A maxi)

Implementation:

- During opening operations the air gap must be maintain cleanliness to preserve the metrological characteristics.

Version and order code :

- Tio d8-A-mV** : split-core CT, 8mm hole diameter, voltage output (measuring 10A ...30A max)
- Tio d12-A-mV** : split-core CT, 12mm hole diameter, voltage output (measuring 30A ...90A max)
- Tio d17-A-mV** : split-core CT, 17mm hole diameter, voltage output (measuring 90A...160A max)
- Tio d24-A-mV** : split-core CT, 24mm hole diameter, voltage output (measuring 160A...250A max)
- Tio d36-A-mV** : split-core CT, 36mm hole diameter, voltage output (measuring 250A...500A max)

-A : Current range

-mV : 500mV

WIRING OPTION:

- /C** : Connection over un-pluggable spring terminal (only for Tio with hole diameter of 12mm and 17mm)
- /L (meter)** : Default output 3 meter twisted cable. Available up to 30 meters.

Metrology

- Measurable current : 0....10.....500Aac (model dependant)
- Power consumption: < 0.1Watt
- Accuracy : +/- 1% (for 500mV nominal output)
- Linearity : +/- 0.5 % (for 500mV nominal output)
- frequency range: 50Hz....60Hz

OUTPUT (AC version)

Type Range Accuracy

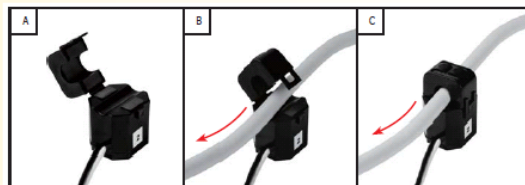
Voltage 0 ... 500mV +/- 5 mV
standard for LOREME devices.

Output impedance: 200 ohms to 10Kohms depending of range (internal shunt)

ENVIRONMENT

Operating temperature -20 to +50 °C
Storage temperature -20 to +85 °C
Relative humidity 85 % (no condensed)
Weight ~ 180 g
Dielectric strength 500 Vrms
insulating resistance > 100 Mohms at 500V

IMPLEMENTATION



Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

Immunity standard for industrial environments
EN 61000-6-2

Emission standard for industrial environments
EN 61000-6-4

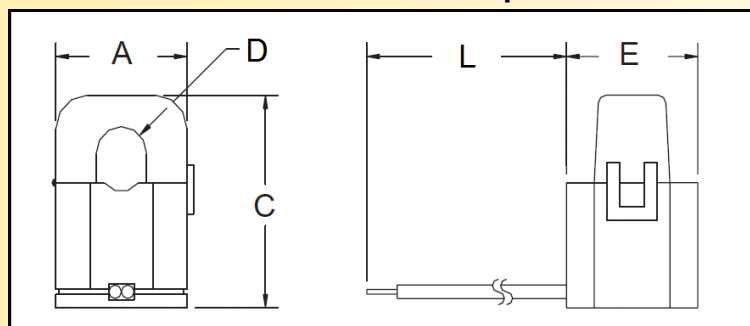
EN 61000-4-2 ESD	EN 61000-4-8 AC MF
EN 61000-4-3 RF	EN 61000-4-9 pulse MF
EN 61000-4-4 EFT	EN 61000-4-11 AC dips
EN 61000-4-5 CWG	EN 61000-4-12 ring wave
EN 61000-4-6 RF	EN 61000-4-29 DC dips

EN 55011
group 1
class A

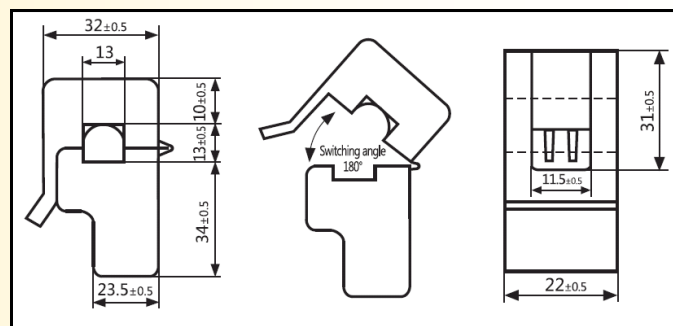


WIRING AND OUTLINE DIMENSIONS:

Tio d17 d24 d36 - AC output



Tio d12



Dimension Model	A Overall width	C Overall height	D Primary passage hole diameter	L Default cable length
Tio d12			12 mm	1 meter
Tio d17	56 mm	51 mm	17 mm	1 meter
Tio d24	34 mm	64 mm	24 mm	1 meter
Tio d36	38 mm	80 mm	36 mm	1 meter

Tio d8

