

## OFLS Series Rogowski Coil

### Description

The OFLS series Rogowski Coil is used for electronic measurement of AC current. The error due to the position of the measured conductor within the aperture and the error due to the proximity of the external conductor are greatly reduced using magnetic shielding techniques.

It has the advantages of fast response, small volume, small power consumption, frequency response width, anti-interference, lightning wave and shock wave protection.



### Specification:

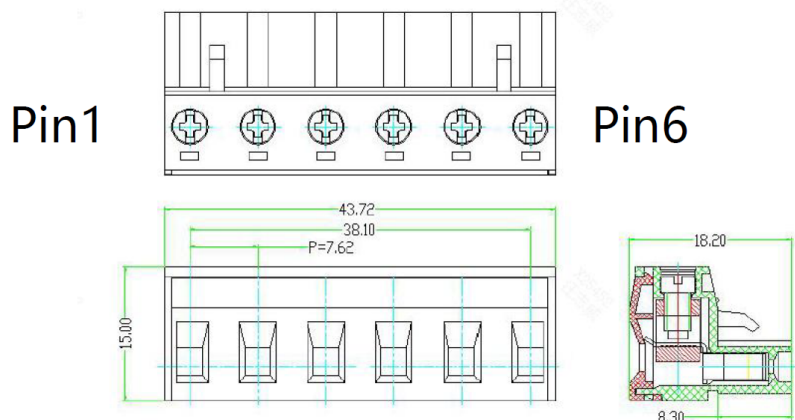
<b>Current Measurement</b>	100kA Max
<b>Window Size</b>	30,40,50,60mm (with a fixed structure) 30,40,50,60,80,100,150,200,300 (without a fixed structure)
<b>Output Signal</b>	0~20mA, 0~10V, RS485, RJ12 (can be customized)
<b>Accuracy</b>	0.5s Class @ Fixed-Position 1.0 Class @ Non-fixed state, busbar passes vertically through the coil. 1.5 Class @ Non-fixed state, busbar inclined through the coil
<b>Rated Frequency</b>	50Hz/60Hz
<b>Linearity</b>	0.1%
<b>Temperature Drift</b>	≤0.5%
<b>Bandwidth (3Db)</b>	45Hz~5kHz
<b>Altitude</b>	4000M
<b>Relative Humidity</b>	≤75% RH
<b>Flame Retardant Rating</b>	PC, UL94-V0
<b>Dielectric Strength</b>	3kV/60s/50Hz
<b>Operating Temperature</b>	-40°C ~ +70°C

### Error Limit Table

	Rated Current $I_b$			
	$1\%I_b > I \geq 0.4\%I_b$	$4\%I_b > I \geq 1\%I_b$	$10\%I_b > I \geq 4\%I_b$	$I \geq 10\%I_b$
<b>Ratio Error</b>	$0.75\% \times (4\%I_b/I)$	1.5%	0.5%	0.25%
<b>Phase Displacement</b>	90'	60'	12'	8'
The ratio error for the portion less than $1\%I_b$ is a dynamic value.				

## Terminal Definition:

### Sampling Voltage Signal Terminal

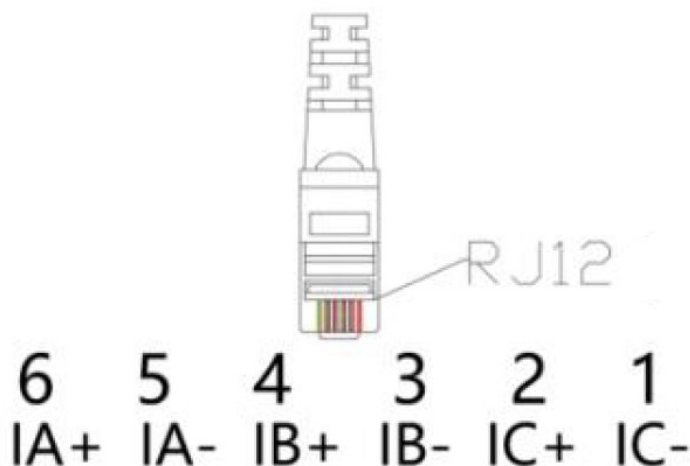


	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6
Wire Color	/	/	Yellow	Green	Red	Blue
Function	/	/	A Phase	B Phase	C Phase	N Phase

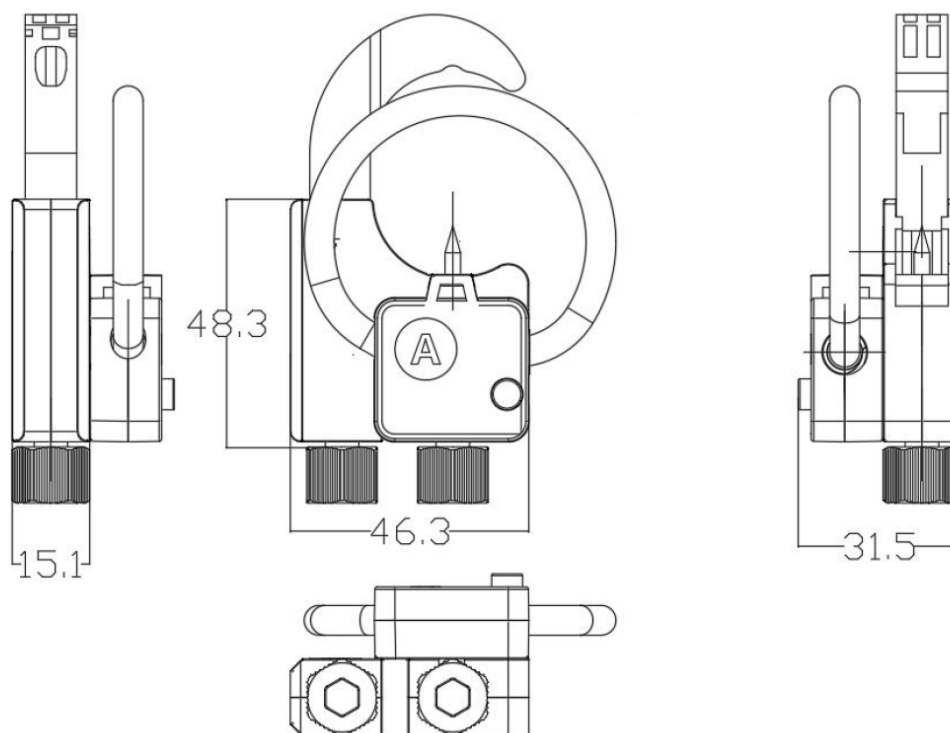
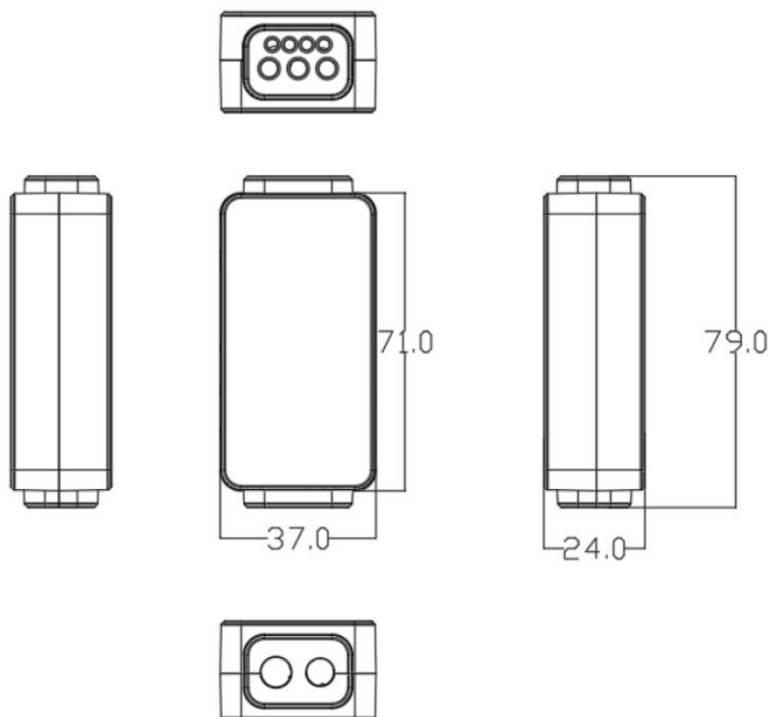
### Power Supply Terminal

Terminal Type	Definition	Description
E0308 Red	5V	Provided by the DIN-rail meter, voltage range: $+5\pm0.2V$ The power supply capacity is not less than 100mA.
E0308 Black	GND	

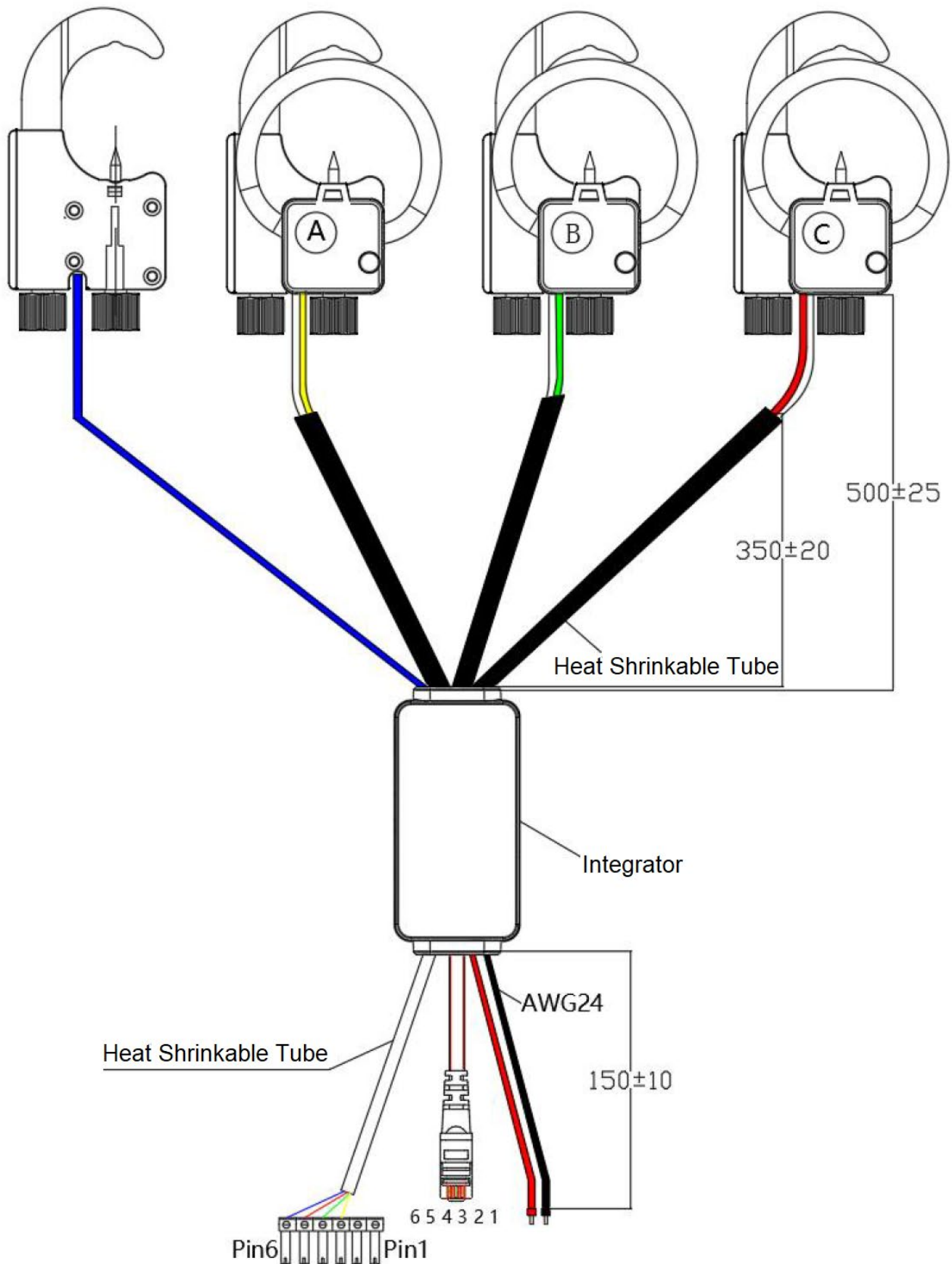
### RJ12 Terminal



IA+	IA-	IB+	IB-	IC+	IC-
Yellow	Blue	Red	Green	Black	Brown

**Dimensions:**
**Unit: mm**
**Rogowski Size:**

**Integrator Size:**


### 3 in 1 Type



## Rogowski Fixation Method



1. Open the Rogowski coil and attach it to the cable.
2. Rotate the screw by hand to lock the cable with the pull hook.
3. Rotate the piercing needle knob to make the needle pierce the cable and come into contact with the core of the tested cable.
4. Close the Rogowski Coil

## Warning!

- Ignoring the warnings can lead to serious injury and/or cause damage!
- The electric measuring transducer may only be installed and put into operation by qualified personnel that have received an appropriate training. The corresponding national regulations shall be observed during installation and operation of the transducer and any electrical conductor. The transducer shall be used in electric/electronic equipment the respect to applicable standards and safety requirements and in accordance with all the related systems and components manufacturers' operating instructions.

## Electric Shock Warning!

When operating the transducer, certain parts of the module may carry hazardous live voltage (e.g., Primary conductor). The user shall ensure to take all measures necessary to protect against electrical shock. The transducer is a build-in device containing conducting parts that shall not be accessible after installation. A protective enclosure or additional insulation barrier may be necessary. Installation and maintenance shall be done with the main power supply disconnected except if there are no hazardous live parts in or in close proximity to the system and if the applicable national regulations are fully observed.

## Notice!

Safe and trouble-free operation of this transducer can only be guaranteed if transport, storage and installation are carried out correctly and operation and maintenance are carried out with care. Do not stress the coil by applying any kind of mechanical force (transport, storage pressure, tight bending.) which will dramatically degrade the device's accuracy.

