

**User's Manual**      **96036**  
**Clamp-on Probe**

Thank you for purchasing our Clamp-on Probe. This manual describes the specifications and handling precautions for a Clamp-on Probe. The following manuals, including this one, are provided as manuals for the 96036. Read them along with this manual.

- IM 96036-E: User's Manual (this manual)
- IM WEEE001E: Waste Electrical and Electronic Equipment
- IM CROHS-96030: Document for China

Contact information of Yokogawa offices worldwide is provided on the following sheet.  
PIM 113-01Z2: Inquiries List of worldwide contacts

Store this manual in an easily accessible place for quick reference.

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**YOKOGAWA**  **IM 96036-E**  
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**Sales in Each Country or Region**

**Authorized Representative in the EEA**

Yokogawa Europe B.V. is the authorized representative of Yokogawa Test & Measurement Corporation for this product in the EEA. (EEA: European Economic Area)  
To contact Yokogawa Europe B.V., see the separate list of worldwide contacts, PIM 113-01Z2.

**Regarding Safe Use of This Product**

This product is designed to be used by a person with specialized knowledge. When operating the instrument, be sure to observe the cautionary notes given below to ensure correct and safe use of the instrument. If you use the instrument in any way other than as instructed in this manual, the instrument's protective measures may be impaired. This manual is an essential part of the product; keep it a safe place for future reference. YOKOGAWA is by no means liable for any damage resulting from use of the instrument in contradiction to these cautionary notes.

**The following safety symbols are used on the instrument and in this manual.**

 **WARNING**

Indicates a hazard that may result in the loss of life or serious injury of the user unless the described instruction is abided by.

 **CAUTION**

Indicates a hazard that may result in an injury to the user and/or physical damage to the product or other equipment unless the described instruction is abided by.

 **Danger! Handle with Care.**  
This mark indicates that operator must refer to an explanation in the instruction manual in order to avoid risk of injury or death of personnel or damage to the instrument.

 This symbol indicates that this instrument designed to be applied around or removed from HAZARDOUS LIVE conductors provided if the RATED circuit-to-earth voltage dose not exceed the value indicated in the measurement category.

 This symbol indicates AC voltage/current.

 This symbol indicates double insulation.

**Strictly observe the following cautionary notes in order to avoid the risk of injury or death of personnel or damage to the instrument due to hazards such as electrical shock.**

 **WARNING**

- This instrument is for measuring AC current (clamping sensor). Do not use this instrument for other purpose.
- Do not use the instrument if there is a problem with its physical appearance.
- To avoid a short-circuit or an accident to personnel, use this product within the RATED circuit-to-earth voltage of measurement category.
- Do not use the product when there are raindrops or droplets of condensed water on its surface, or if your hands are wet.
- Barrier is for to avoid touching the HAZARDOUS LIVE conductor. Be careful not to across the Barrier when using the instrument.
- Safety protectors such as rubber-insulated gloves should be worn to prevent electrical shock when using the instrument.
- Do not use this product in a place where an explosive gas or vapor is present.
- Do not use the instrument if there is any damage to the casing or when the casing is removed. Do not attempt to repair/modify the product yourself, as doing so is extremely dangerous. Should an abnormality or failure in the product be found, contact the vendor from which you purchased the product.

 **CAUTION**

- The clamping JAWS are precision assembled to ensure high performance. When using the clamp, do not apply intense mechanical shock, vibration, or force to the clamping JAWS.
- If dust or any other foreign matter gets in the clamping JAWS, do not close the clamping cores tight. First remove the dust and then make sure the clamping cores on both sides close smoothly.

 **CAUTION**

This product is a Class A (for industrial environments) product. Operation of this product in a residential area may cause radio interference in which case the user will be required to correct the interference.

**Cleaning**

To remove dirt, disconnect the connector and gently wipe the outer surface with a clean and soft cloth. Do not use a chemical agent such as benzene or paint thinner.

**Measurement Category**

 **WARNING**

The 96036 is designed for measurement category III. Do not use the 96036 for measurements in locations falling under Measurement Categories IV.

Measurement category	Description	Remarks
0 (None, Other)	Other circuits that are not directly connected to MAINS.	Circuits not connected to a mains power source.
CAT II	For measurement preformed on circuits directly connected to a low-voltage installation.	Appliances, portable equipment, etc.
CAT III	For measurement preformed in a building installation.	Distribution board, circuit breaker, etc.
CAT IV	For measurement preformed at the source of a low-voltage installation.	Overhead wire, cable systems, etc.

**Specifications**

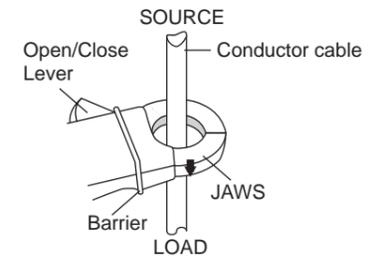
Item	Model 96036
Measurement range	0 to 2 Arms AC
Output voltage	0 to 50 mVrms AC (25 mV/VA)
Accuracy	Amplitude
	Phase
(Tested at 23 ±5°C and 35 to 75% relative humidity and with sine wave input)	
Temperature coefficient	0.05% of full scale/°C over 0 to 18°C and 28 to 50°C ranges
Maximum allowable current	60 Arms AC (45 Hz to 66 Hz)
	20 Arms AC (66 Hz to 3.5 kHz)
Output impedance	Approx. 70 Ω
Effect of external magnetic fields	2 mA equivalent or less (400 A/m, 50/60 Hz) ±30 ppm max. (for an electric current of 100 A flowing through the adjacent electric wire)
Effect of conductor position	Within ±0.5% (0.2 to 2 A, 45 Hz to 1 kHz)
The RATED circuit-to-earth voltage	50 Vrms AC max.
Withstand voltage	2.7 kV AC for one minute (between core and case and between core and output)
Measurable conductor diameter	φ 40 mm max.
Operating temperature and humidity ranges	0 to 50°C, 5 to 85% RH (no condensation)
Storage temperature and humidity ranges	-20 to 60°C, 90% RH max. (no condensation)
External dimensions	Approx. 70 (W) × 120 (H) × 25(D) mm (excluding protrusions)
Weight	Approx. 300 g
Output cable length	Approx. 3 m (Output terminal: Safety banana plug)
Accessory	User's manual (1), Ring markers (4 colors × 2): L4007MG

**For Precise Measurements**

Use this product under the following ambient conditions.

- Temperature: 23 ±5°C
- Relative humidity: 35 to 75% (no condensation)

- When performing a measurement, hold the probe so that the measured conductor cable runs at the center of the clamp.
- Ensure that the orientation of the clamp to the direction of the conductor cable (power source → load) is correct as shown right.
- Ensure that the clamping JAWS are properly closed.



**Safety standards**

EN 61010-1, EN 61010-2-032  
Measurement category III  
(The RATED circuit-to-earth voltage: 50 Vrms)  
Indoor use, Altitude 2000 m or less, Pollution degree 2

**Pollution degree**

The pollution degree of the 96036 in the operating environment is 2. Pollution Degree applies to the degree of adhesion of a solid, liquid, or gas which deteriorates withstand voltage or surface resistivity. Pollution Degree 2 applies to normal indoor atmospheres. Normally, only nonconductive pollution is emitted. However, a temporary electrical conduction may occur depending on the concentration.

**EMC standards**

EN 61326-1 Class A  
EN 55011 Class A Group 1  
EMC Regulatory Arrangement in Australia and New Zealand  
EN 55011 Class A Group 1

**Environmental standard:**

EN 50581  
Monitoring and control instruments including industrial monitoring and control instruments

**External Dimensions**

