

Instruction Manual ICA 15

AC Current Transducer













ICA 15 AC Current Transducer OPERATOR'S MANUAL

INTRODUCTION

1-1 Unpacking and Inspection

Upon removing your new current transducer from its packing, you should have the following items:

- 1. Current Transducer.
- 2. Instruction Manual.

1-2 Meter Safety

Terms marked on Equipment.

- ⚠ **ATTENTION** Refer to Manual.
- DOUBLE INSULATION Protection Class II.
- **DANGER** Risk of electric shock.

Symbols in this Manual

⚠ This symbol indicates where cautionary or other information is found in the manual.

1-3 Front View

Refer to Figure 1 and to the following numbered steps to familiarise yourself with the transducer:

- **1. Transformer Jaws** Designed to pick up the a.c current flowing through the conductor.
- **2. Hand Guard** Designed to protect user for safety.
- **3. Trigger** Press the lever to open the transformer jaws.

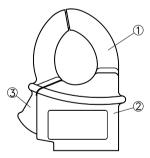
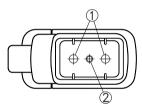


Fig.1

1-4 Bottom View

Refer to Figure 2 and to the following numbered steps to familiarise yourself with the transducer:

- 1. Output Plugs Output terminals.
- 2. Adjusting Hole For service personnel use .



SPECIFICATIONS

Current Range: 0.1A to 300A a.c. RMS

Output Voltage: 1mV a.c. per 0.1 Amp a.c.

Working Voltage: 300V CAT. III per IEC 1010-1

Maximum Altitude: 2000m

Operating Temperature : 0°C to 45° C <75% R.H.

Storage Temperature: -20°C ~ 60°C

Type of Sensing:

Induction coil sensing for AC current.

Temperature Coefficient:

0.2 x (Specified accuracy) / °C, <18°C or >28°C.

⚠ THIS INSTRUMENT MUST NOT BE USED ON UNINSULATED CONDUCTORS AT A VOLTAGE GREATER THAN 250V ac/dc.

Electrical Specification

Accuracy is \pm (% reading + number of Ampere) at 23°C \pm 5°C, less than 75% R.H.

Range	Measure	Output	Accuracy
300A	3Amp	0.030V	±(1.9%+0.5A) 50 ~ 60Hz
	30Amp	0.300V	
	300Amp	3.000V	

Maximum Output Impedance : 120Ω .

Maximum Jaw Opening: 30mm.

Maximum Conductor Size: 29mm diameter. **Size**: 72mm (W) x 102mm (L) x 36mm (D).

Weight: 150 grams.

Accessories: Manual

Precautions and Preparations for measurement

- 1. Do not apply the voltage to the output plugs.
- 2. Do not use or store this instrument in a high temperature or high humidity environment and do not store the unit in direct sunlight.
- 3. Do not measure current before the unit is connected to a digital multimeter.
- If the instrument is used near noise generating equipment, be aware that the output voltage may become unstable or generate erroneous readings.

OPERATION

3-1 AC Current Measurement

- 1. Set the DMM at ACV and 3V range.
- 2. Connect the ICA15 transducer to the multimeter voltage inputs.
- 3. Press the trigger to open the transformer jaws and clamp one conductor only, make sure that the jaws are firmly closed around the conductor then read the result from the digital display of the digital multimeter.

MAINTENANCE

To keep the instrument clean, wipe the case with a damp cloth and detergent, do not use abrasives or solvents.

Any adjustment, maintenance and repair must be conducted by qualified service personnel.

Africa RS Components SA P.O. Box 12182, Vorna Valley, 1686 20 Indianapolis Street, Kyalami Business Park, Kyalami, Midrand, South Africa www.rs-components.com Asia RS Components Pte Ltd. 31 Tech Park Crescent, Singapore 638040 www.rs-components.com China RS Components Ltd. Suite 23 A-C, East Sea Business Centre Phase 2, No. 618 Yan'an Eastern Road Shanghai, 200001, China www.rs-components.com Europe RS Components Ltd. PO Box 99, Corby, Northants. NN17 9RS, United Kingdom www.rs-components.com Japan RS Components Ltd. West Tower (12th Floor), Yokohama Business Park, 134 Godocho,

Hodogaya, Yokohama, Kanagawa 240-0005.

Japan www.rs-components.com U.S.A

Allied Electronics 7151 Jack Newell Blvd. S. Fort Worth, Texas 76118, U.S.A. www.alliedelec.com

South America RS Componentes Limitada Av. Pdte. Eduardo Frei M. 6001-71 Centro Empresas El Cortijo Conchali, Santiago, Chile www.rs-components.com