Instruction Manual
ICA 31
AC Current Transducer

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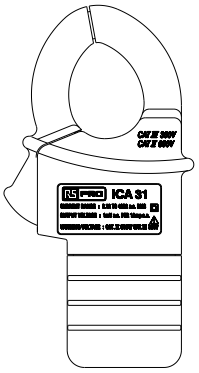

ICM31
AC Current Transducer
INSTRUCTION MANUAL

INTRODUCTION

1-1 Unpacking and Inspection

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

1. Current Transducer with coiled cable out put plugs.
2. Instruction manual.
3. Carrying Case.

1-2 Front View

Refer to Figure 1 and the following numbered steps to familiarize yourself with the transducer.

1. Transformer Jaws — Designed to pick up the a.c. current following through the conductor.

2. Hand Guard — Designed to protect user for safety.

3. Trigger — Press the lever to open the transformer jaws.

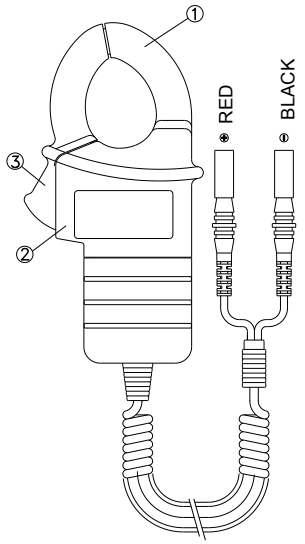

Figure 1

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.

SPECIFICATIONS

Current Range : 0.1A to 400A a.c. RMS.

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

Working Voltage : 600V CAT. II 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

Temperature Coefficient :
0.2x(Spec Acc'y)/ °C, < 18°C or > 28°C
Maximum Output Impedance : 75Ω.
Maximum Jaw Opening : 30mm.
Maximum Conductor Size : 29mm diameter.
Size : 72mm (W) x 148mm (L) x 36mm(D)
W/O cable.
Weight : 250grams.
Indoor use.
Maximum Altitude : 2000 meter.
Accessories : Manual , Carrying Case.

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 not combined with DMM.

4. If the instrument is used near noise generating equipment , be aware that output voltage may become unstable or get more errors.

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

Electrical Specification

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

Range	Measure	Output	Accuracy
400A	3Amp	3mV	±(1.9% + 0.5A) 50 ~ 60Hz
	30Amp	30mV	
	350Amp	350mV	
	400Amp	400mV	±(3.2% + 1A) 50 ~ 60Hz

OPERATION

AC Current Measurement

1. Set the DMM at ACV Function and proper range.
2. Connect the plug of transducer with DMM firmly.
3. Press the trigger to open transformer jaws and clamp one conductor only, making sure that the jaw is firmly closed around the conductor and reading the result from the digital display of DMM.

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 shall be conducted by a service personnel.

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