THE INFORMATION CENTRE IC 910

Breaking New Ground In Energy Management

Introduction

The Autometers information centre 900 series is a new range of meters which has been specifically designed to meet the strict requirements of switchboard manufacturers around the world.

ΠI

Designing a meter which is not only very accurate but small and compact, (96 square mm) easy to install and has an optional advantage of being able to be fitted at a later date with communication modules for BMS systems.

The IC 900 series is a range of Multifunction meters offering many different types of information ranging from just kWh (IC 910) to a meter showing many parameters including voltage and current harmonic analysing. (IC 990) All the 900 series meters have been designed to be fully compliant to integrate with the Autometers Horizon range of modules for data logging and interrogation.

The Information Centre 910

The information centre IC 910 has been specifically designed and manufactured as a cost-effective meter displaying Kilo watt hour units. The meter is fully programmable to meet all the popular sizes of current ratios that are used.

The Display

The display has 7 large LCD numbers indicating kWh units consumed and three small numbers 1, 2 and 3 which will flash if the meter senses a reverse power flow. *See picture A*.



The IC910 also has two other features to help the installer. One is the current transformer ratio which when programmed will be indicated when the meter is first powered on (*see picture B, meter has been set to 400/5 amp*) and also the facility to switch the meter into engineering display. This display inserts two decimal places on the kWh register for quick testing.

Pulse Output

Fitted as standard on the IC 910 is an optically isolated volt free pulse output which can be adjusted to either at 1 kWh/imp or 10 kWh/imp. There is a red LED indicator on the front of the meter which will flash indicating the closure of the contacts on the pulse output relay.

3 PHASE 4 WIRE (LV)	230 / 400 Volts 50 / 60 Hz 5 Amp (CT operated).
Energy IMP	Total kWh.
Pulse Output	Factory programmable to either 1 kWh/imp or 10 kWh/imp.

System Use

Although the IC 910 meter can be used in a stand-alone situation, it is ideal for sub meter measuring from different departments and locations. The meter has been designed to ensure that it can be connected using the pulse output to the new Horizon range of data modules enabling interrogation by Autometers software systems.

Front Panel

The front panel of the IC 910 consists of a sealed membrane facia manufactured from polyester for greater durability and resistance to chemical attack.

CE Approval

The IC 910 has been fully examined and tested in accordance with the standards listed and meets the specified requirements defined in BS EN 61326:1997 inc. A1, A2 & A3 – Electrical equipment for measurement, control and laboratory use – EMC requirements.

- **1.** BS EN 61326:1997 inc. A1, A2 & A3: Conducted Emissions
- 2. BS EN 61326:1997 inc. A1, A2 & A3: Radiated Electric Field Emissions
- **3.** BS EN 61000-4-2:1995 inc. A1 & A2: Electomagnetic Compatibility
- **4.** BS EN 61000-4-3:2002 inc. A1 & A2: Electomagnetic Compatibility
- **5.** BS EN 61000-4-4:1995 inc. A1 & A3: Electomagnetic Compatibility

TECHNICAL DATA & PERFORMANCE

Design

The IC 910 is designed to measure accurately in a 3 phase 4 wire star configured system.

Installation

An aperture of 92mm by 92mm is required to install the meter into a panel with a minimum depth of 89mm.



TECHNICAL PARAMETERS

Meter Standard	BS EN 61036
Pulse Output	BS EN 62053-31
Accuracy	Class 1.0
Reference Voltage	3 * 230/400 V
Basic Current	5A
Maximum Current	6A
Frequency	50/60 Hz
Pulse Constant (st)	1000 imp/kWh
Voltage Range	200-250 V
Operating Temp	-20 + 70 C
Storage Temp	-30 + 80 C
Power Consumption	0.5va @ 5 amp 0.8w 8va @ 230 volt
Pulse Output	Programmable 1 kWh or 10 kWh

Programming The C.T.

Programming the current transformer ratio is done by selection on the binary switch located on the back of the meter (red in colour).

Connecting The Meter

There are 15 brass terminals with self captivating screws on the back of the meter. A maximum of 12 terminals are used for the IC 910 meter.

Dimension and Terminal Arrangements





Product development is continuous and Autometers Ltd reserves the right to make alterations and manufacture without notice. Products as delivered may therefore differ from the descriptions and illustrations in this publication.

A U T O M E T E R S

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