

installation and operating manual

AUTOMETERS

# ECLIPSE 1 METER INSTALLATION AND OPERATION.

### CHECK CONTENTS

Package should contain:

- 1. Meter
- Fixing clamps (qty 2) with screws inserted
- 3. Installation and operation manual

Eclipse 1 meters are designed to display kWh or kVARh power measurement information. All Eclipse 1 meters are fitted with one relay, volt free normally open contacts. All the connections are captive screw terminals at the back of the meter.

The front panel has a single line, 16 character display.

# INSTALLATION OF THE METER

Eclipse meters should be mounted so that the front panel is vertical. A typical panel would be a switchgear cabinet door. The meter requires a depth behind the panel of 115mm (including wiring) A single square aperture 92mm wide x 92mm high should be prepared. Enter the meter into the aperture and secure it using the two fixing clamps provided. Connect the meter as shown on diagram Figure 4.

#### LOCATION

Meters should be mounted in a dry, dirt free environment, away from heat sources and very high electric fields. Temperatures should not exceed 70°C or fall below -20°C.

#### MAINTENANCE

Eclipse Series meters incorporates E<sup>2</sup> PROM for memory back-up. Eclipse Series meters do not require any regular maintenance.

# FIELD SERVICE CONSIDERATIONS

In the unlikely event that a unit should fail, it will normally be serviced by exchanging the faulty unit with a replacement unit. The initial installation should be done in such a way which makes the replacement procedure as convenient as possible.

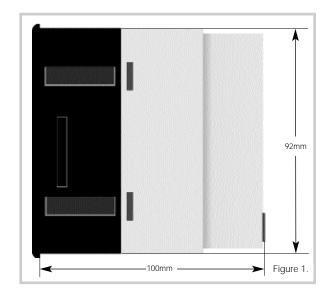
- A Current Transformer shorting block should be provided so that the meter current inputs can be disconnected without the Current Transformers becoming open circuit. The shorting block should be wired so that protective relays are not affected.
- All wiring should be routed to allow easy removal of the connections to the terminals.

#### I MPORTANT

The attention of the specifier, purchaser, installer and/or user is drawn to special measures and limitations or use which must be observed when these products are taken into service to maintain compliance with the CE Directives.

Details of these special measures and limitations of use are shown in the following publications available from HMSO.

Ref: IEC 1000-5-1 (BS195/210788DC) IEC 1000-5-2 (BS195/214642DC) IEC 1000-5-6 (BS195/210789DC)



# DEDICATED CUSTOMER SERVICE

Customer care is the cornerstone of Autometers' success with a positive service policy observed throughout every specialist area of operation. The direct involvement of the directors at every level, a fully trained and highly motivated workforce and in-depth stock holding combine to provide a level of service and quality which has earned the appreciation of customers throughout the UK and overseas markets.

Computerised distribution systems are programmed to provide consistent 24 hour despatch of products. In response to exceptionally urgent demand for small orders, it is possible to process the order and despatch product within 20 minutes.

## PRODUCT RANGE

Metering and monitoring equipment ranges from single and three phase kWh electro-mechanical meters to a range of sophisticated, fully programmable information centres. The product range also includes: Electronic meters
Panel mounted meters
Maximum demand meters
DIN rail meters
Current transformers

# Programming THE CT RATIO

Setting is by means of a binary switch located at the back of the meter as shown in Figure 2. To alter to the desired CT setting, slide the white switch to the correct position.

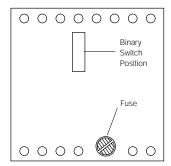
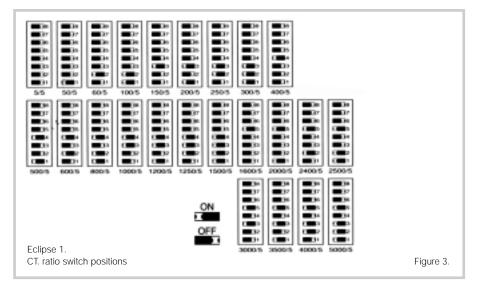
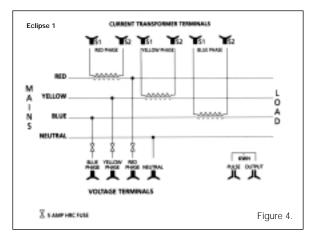


Figure 2. Indicates Position of binary switch





## ATTENTION:

- · Never link the Secondary of the current transformers to earth
- Never create a common point between the current transformer
- · Never place in series with other instruments
- · Do not meggar test

### WIRING

Electrical connections are made directly to the back of the meter. See diagram above.

# ELECTRICAL CONNECTIONS

2.5 sq.mm wire is recommended for all electrical connections, subject to the distance between the meter and the current transformer.
Phasing and polarity of the AC current and voltage inputs, and their relationship is critical to the correct operation of the unit.

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

THE METERING AND
MONITORING SPECIALIST

# AUTOMETERS

Autometers Ltd

4B Albany Road, Chorlton-cum-Hardy, Manchester M21 0AW
Tel: +44 (0)161 861 9056 Fax: +44 (0)161 881 3745
email: sales@autometers.co.uk
www.autometers.co.uk