

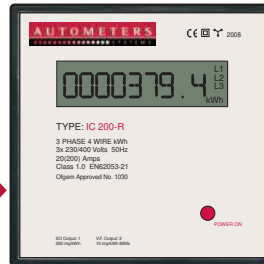
TYPE: IC 200-IM-R

INTRODUCING THE OFGEM APPROVED IC 200-IM-R

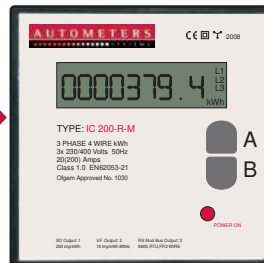
The IC 200 is a new concept in energy monitoring, designed specifically for switchboard manufacturers. Ofgem approved, the IC 200 is a three-phase, four-wire 200amp direct connect kWh meter that can fit above or below standard three-phase circuit breakers. A special Bridge Set is available to connect directly with the NS range of circuit breakers.



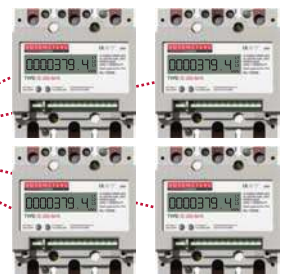
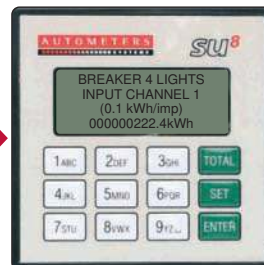
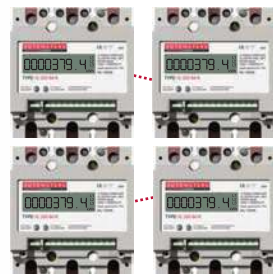
The IC 200-IM-R basic meter with volt free pulse output.



The IC 200-IM-R basic meter with Standard Remote register IC 200-R and volt free pulse output.



The IC 200-IM-R basic meter with Modbus Remote register IC 200-RM and volt free pulse output.



The IC 200-IM-R basic meter connected to the SU8 panel meter using the volt free pulse output. A maximum of 8 meters can be used with the SU8.

SAVE TIME AND MONEY WITH THE IC 200

The unique, compact design of the IC 200 provides easy installation, removing the need for panel meters, external current transformers, protection fuses and extensive wiring. The IC 200 has also been designed as a stand alone meter for installation into many other positions in the switchboard panel and in other industrial applications.

The IC 200 offers a wide range of display options. The integral display is ideal when surface mounting, or a remote 96mm panel mounted display can be connected via a 2 metre umbilical cord. An SU8 summation meter can be used to monitor the pulse outputs of up to eight IC 200 meters and has the benefit of displaying individual meters and the summated kWh total - see the SU8 brochure at www.autometers.co.uk for more details. The IC 200 has an RS485 Modbus option, ideal for use with the Autometers Horizon or other remote building management systems.

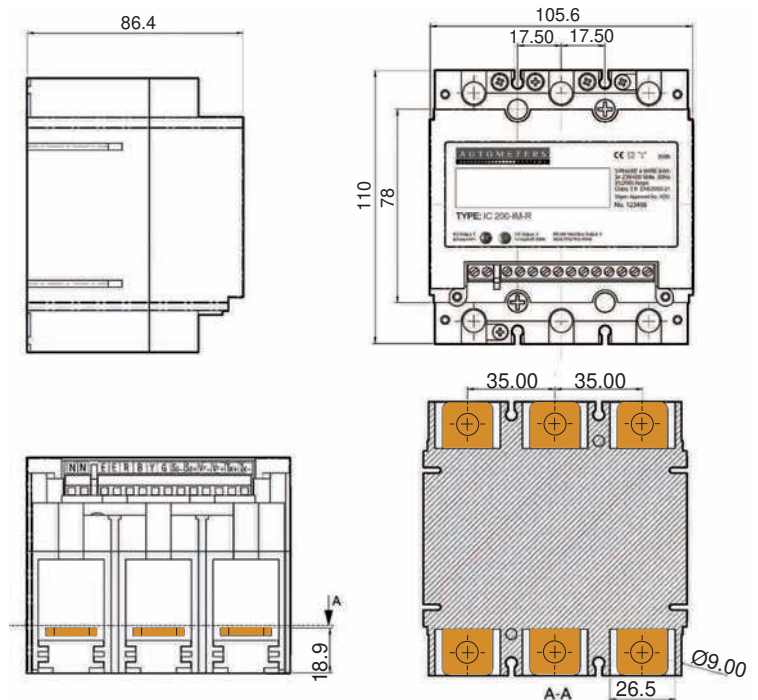
The IC 200 will:

- **cut costs** – no current transformers to purchase and reduced installation costs
- **save time** – IC 200 is very quick and easy to install with minimal wiring
- **reduce paperwork** – streamlining the system with fewer products to order, check and store

TYPE: IC 200-IM-R

A NEW CONCEPT IN ENERGY MONITORING

- OFGEM approved
- no current transformers
- minimal wiring
- simple to install
- multiple display options
- multiple switchboard & industry applications
- fully compatible with the Horizon system



FUNCTIONAL AND TECHNICAL DATA

IC 200-IM-R poly-phase meter is intended for residential and small commercial customers. It is used for revenue measuring of active energy in three phase four wire networks.

Measuring and registration:

Uni-directional import only.

Accuracy/calibration:

Due to long-term metering stability there is no need for meters to be calibrated in their life.

Light Indications:

LED 1. (red) SO. Output (for calibration testing).

LED 2. (red) Volt free pulse output (for BMS systems).

Blinking:

Load current higher than the starting CURRENT.

Lit:

Voltage applied to the meter, load current is smaller than the starting current.

Turned off:

No voltage applied to the meter.

Communication:

Serial interface RS 485 Modbus.

Multi-phasing metering operation:

The meter can be connected as a single, two or three phase meter.

Display Indicating:

8 digit 7 segment LCD. (12x5mm)

L1, L2, L3 (will illuminate when line voltage is present).

kWh (indicating type of energy).

On power up:

- Automatic scroll showing serial number, kWh and Modbus.
- After 5 minutes display show kWh with two decimal places (for test).
- After a further 5 minutes the display will show 8 digits (7+1 decimal).

Current terminals:

Copper with 9mm through hole suitable for lug connections only. M8 threaded screw for clamping lug to terminal.

Neutral and communication terminals:

Rated voltage AC300V, rated current 16A, wire size 26-14AWG.

Enclosure:

Self extinguishing uv stabilised polycarbonate.

TYPE DESIGNATION FOR ORDERING

IC 200-IM-R

Meter base with impulse output, Modbus output and Remote display output.

IC 200-R

96mm panel mounted remote display capable of displaying kWh.

IC 200-R-M

96mm panel mounted remote display capable of showing the kWh, also required to program the Modbus address.

SU8

96mm panel mounted remote display capable of displaying up to 8 pulse inputs and Summating all inputs.

TECHNICAL DETAILS

| | |
|----------------------------------|-----------------|
| Accuracy class..... | 1 (EN 62053-21) |
| Basic current Ib..... | 20A |
| Max. Current Imax..... | 200A |
| Starting Current..... | 0.004Ib |
| Rated Voltage..... | 3x230/400 V |
| Operating Temperature Range..... | -25°C...+60°C |
| Storage Temperature..... | -35°C...+75°C |
| Current circuit burden..... | <0.5 VA |
| Voltage circuit burden..... | <2 W/10 VA |
| Impulse Voltage..... | 6 kV, 1.2/50µs |
| Short-Circuit Current..... | 30 Imax |

EMC:

High Frequency Disturbances (IEC 1000-4-4)

Pulse outputs:

SO (IEC 62054-21) 200imp/kWh

Volt free 100ms 10imp/kWh

Dimensions with no terminal covers fitted:

105.6 x 110 x 86.4mm

With terminal covers fitted:

273 x 109 x 86.4mm

Weight:

1.25 kilos