

# JG180

## Single Phase Credit Meter

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### Electrical Specification:

20 - 100 ampere 230 volts 50Hz.

Meter constant = 800 pulses minimum running current 0.2%.

Power losses 0/watts 230V 50Hz.

Voltage ccf 5.75VA at 230V current cctVA at 20A.

Accuracy Class 2.

Manufactured to ISOEN 1036.

Fully complaint to EMS Regulations BS EN 50081 -1 BS EN 50082 -1.

### Operational Data:

Non registration with voltage alone logical creep inhibits circuit.

Installation test - 2000V rate of consumption UFD (Red is 8KHz modulated for opto pick up).

### Size and Weight:

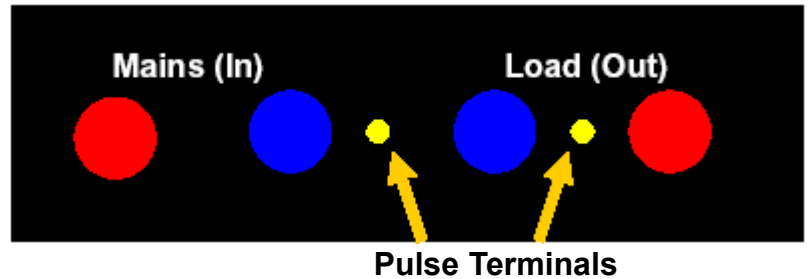
127mm wide.

58mm deep.

177mm high.

0.9kg.

### Wiring Diagram



### Case:

Construction - phenolic case, the base of which forms the terminal chamber and the electronic assembly area.

Terminals - Brass to BS 5685 Point 1 - connect directly to a manganin shunt in the live circuit.

Sealing Points - Case and terminals covers are both suitable for Bowden cable seals.

### Storage and Operating Conditions:

Operating : -20°C to +55°C.

Storage : -25°C to + 70°C.

### Register:

7 Digit 4.7mm high graduated to 0.01kWh . Mechanical register, driven by stepper motor.

Legend Plate - Polycarbonate clip in name plate with integral light guides.

### Anti Tamper Features:

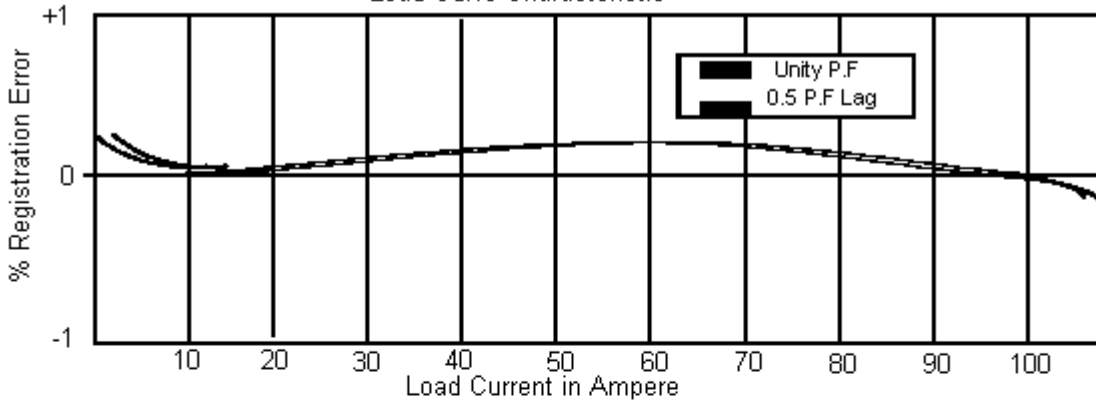
Reverse Current - indicated by Green LED.

Compact modular design, with rear seal release points.

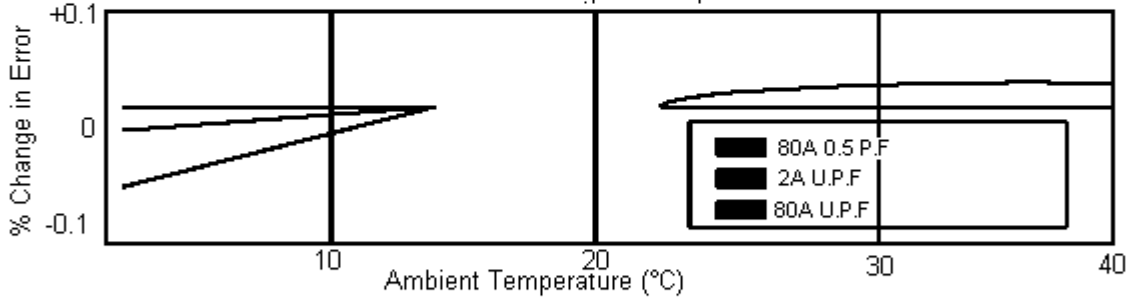
Hardened mild steel shields are incorporated for improved mechanical and electro magnetic protection.

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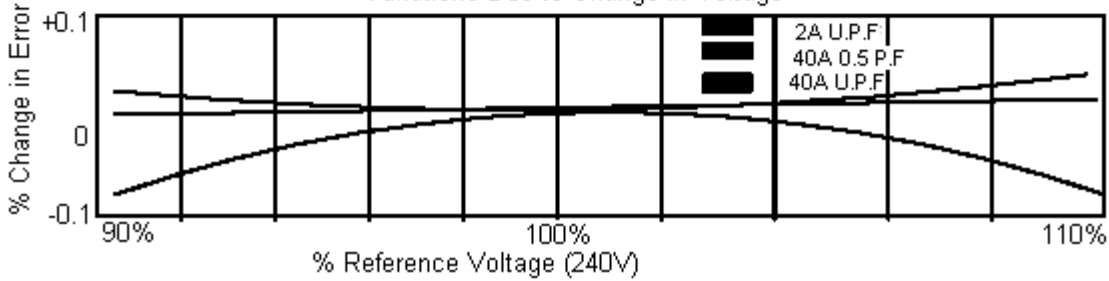
Load Curve Characteristic



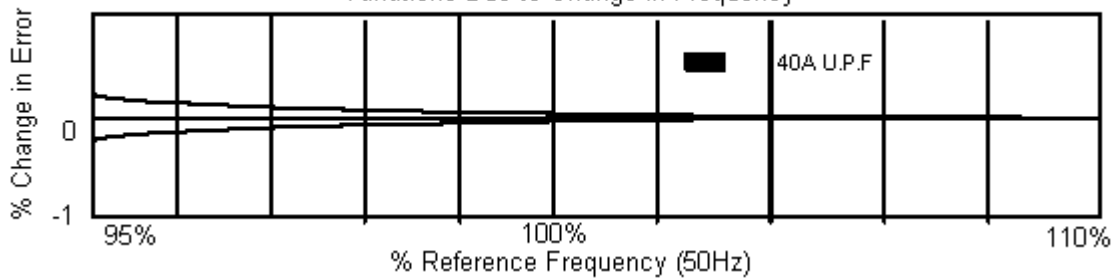
Variations Due to Change in Temperature



Variations Due to Change in Voltage



Variations Due to Change in Frequency



# JG180

## Single Phase Credit Meter



### Pulse Operation:

Pulse Meter - provides a reliability with long life operational profile.

The pulse collection and transmitting printed circuit board has been designed with the benefits of practical and historical knowledge.

Pulses per kWh = 100.

### Pulse Data:

Pulse Width : 250ms.  
Maximum Ratings : Emitter.  
DC Forward Current :  $\pm 50$ mA.  
Surge Forward Current : 2.5A.  
Total Power Dissipation at 25°C : 70mW.

### Detector:

Collector Emitter Voltage : 55V.  
Emitter Collector Voltage : 7V.  
Collector Current : 50mA.  
Surge Collector Current : 100mA.  
Total Power Dissipation at 25°C : 150mW.

### Package:

Isolation Test Voltage between Emitter and  
Detector Reference Climate Din 40046 Part 2 : 5300V dc.  
Creepage Distance : 7mm.  
Clearance Distance : 7mm.  
Operating Temperature Range : -55°C to +100°C.

### Part Number Table

Description	Part Number
Single Phase Credit Meter	JG180

### Notes:

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