

MAGNETIC CARD OPERATED ELECTRONIC METER & TIMER MODEL TYPE: MCM-030

USER MANUAL FOR SPECIFICATION AND OPERATING SETTINGS

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MID APPROVED CARD METER | CERTIFICATE NO: 0120/SGS0184

DECLARATIONS

This meter complies with Class B (1%) to EN50470 1-3

MID Approval Certificate No. 0120/SGS0184

This meter is intended to be installed in a Mechanical Environment 'M1' with Shock and Vibrations of low significance, as per 2014/32/EU Directive.

This meter is intended to be installed in electromagnetic Environment 'E2', as per 2014/32/ EU Directive.

This meter is intended for Indoor use only.

This meter is intended for Non Condensing humidity.

Note that this meter is sealed and there are no user serviceable parts and no user adjustments, other than the Landlord / Meter Owner settings of the metering functions and tariffs. The maintenance and repair of this meter is only permissible by RDL Meters Ltd.

GUARANTEE

This meter is guaranteed for a period of 12 months from the date of purchase, subject to the following guarantee conditions:

This meter is covered by RDL Meters Ltd for parts and manufacturing labour.

This guarantee will not cover any Consequential losses.

This guarantee will be void under any of the following conditions:

- Removal of one or both seals to the case and terminal cover
- The meter has not been installed by a competent, qualified electrician to standards that satisfy the requirements of the current Institute of Electrical Engineers (IEE)
- The meter has been incorrectly installed
- The meter has been subject to a load of greater than 100 Amps
- The meter has been tampered with, to obtain free electricity

If returning the meter, please contact RDL Meters Ltd to report the return and to arrange an RMA (Return Merchandise Authorisation) number. Make sure that the meter is carefully packed.

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1. INTRODUCTION

1.1 Overview

This manual covers the specification and operation for the MCM-030 single phase prepayment magnetic card meter and timer for operating in METER MODE.

The main features of the product are:

- All solid state with 2 x 16 character LCD
- Uses secure disposable magnetic token cards available in Sterling, Euro and Dollars
- When valid token card is inserted, value credit is copied from the card to the meter
- Multiple cards may be entered in one session
- Card is erased and permanently marked
- User settable cost per unit for Rate 1 and 2 in the range £0 to £99.99
- Programming command card allows settings to be easily changed
- Standing Charge
- Emergency Credit
- Up to 2 tariff rates
- Switching capacity up to 100A
- No battery replacement required
- Internal Real Time Clock with programmable switching
- Reverse Energy Detection
- Extension Terminal Cover to Protect Supply Cables

2. TECHNICAL DATA

The MCM-030 is an alternating Current Static Watt Hour Meter, Class B, with programmable timer function facility. Double Insulated.

2.1 Meter LED & Power Registration Security

The red LED mounted on the front panel will pulse at a rate of 1000 pulses per kWh. Power registration is recorded in non-volatile memory under control of the microprocessor which is updated every 24 hours and in the event of a power failure. There are separate registers for each rate.

2.2 Main Contactor

| Contactor Current Rating: | 100 Amps |
|---------------------------|----------------|
| Terminal Arrangement: | BS 7856 |
| Main Terminal Dimensions: | 8.0mm to 8.2mm |
| Terminal Construction: | Solid Brass |
| Terminal Screws: | 6.0mm |

2.3 Power Supply

| Rated Voltage: | 230V |
|--------------------------|--------------|
| Current Range: | 1.0-20(100A) |
| Frequency: | |
| Operating Voltage Range: | |
| | |

2.4 METROLOGY

| | Meter Accurac | /:Active energy, Class B (| 1%) |
|--|---------------|----------------------------|-----|
|--|---------------|----------------------------|-----|

2.5 Environmental

| Temperature Operating Range: | 25 to 55°C |
|------------------------------|------------|
| Storage Range: | 25 to 55°C |
| Transportation Range: | 25 to 70°C |
| Ingress Protection: | IP51 |

Maximum period of 6 hours at the extremes of its temperature range.

2.6 Dimensions

| Height: | |
|---------|---------|
| Width: | |
| Depth: | 80.00mm |
| Weight: | |
| • | - |

3 NORMAL FUNCTIONAL OPERATION IN METER MODE

3.1 Normal Operation Display

During normal operation the display on the MCM-030 in METER MODE will be one of those shown below.

| DISPLAY | CONTACTOR | REMARKS |
|-----------------------------------|-----------|--|
| XXXXXXXXXX kWh R1 £XXX.XX Cred | Closed | XXXXXXXXX kWh registered on current tariff. Rate 1 represents the current tariff. The consumer has £XXX.XX credit remaining. |
| XXXXXXXXXX kWh R1 £0.00 Credit | Open | XXXXXXXXX kWh registered on current tariff. Rate 1 represents the current tariff. The consumer has used up all credit. |
| XXXXXXXXXX kWh £XXX.XX Debt | Open | XXXXXXXXX kWh registered on current tariff. The consumer has used up all credit and has accumulated a standing charge debt of £XXX.XX. |
| XXXXXXXXXX kWh R1 £XXX.XX Emer | Closed | XXXXXXXXX kWh registered on current tariff. Rate 1 represents the current tariff. The consumer has selected emergency credit. £XXX.XX represents the emergency credit remaining. When £XXX.XX reaches £0.00 the display will change to this format below. |
| XXXXXXXXXX kWh £XXX.XX Debt | Open | XXXXXXXXX kWh registered on current tariff. The consumer has used up all emergency credit and has accumulated a debt of £XXX.XX |

3.2 Additional Displayed Information

When the meter is operating normally, momentarily pressing the GREEN button will sequence through the parameters, as listed in the table overleaf. If during a manual sequence cycle, the GREEN button is not pressed within 10 seconds, the meter will revert to its normal display and operation. The table overleaf gives a list of the 17 sequentially displayed parameters.

METER MODE

| STEP | DISPLAY | REMARKS |
|------|--------------------------------------|--|
| 1 | **DISPLAY*TEST** **DISPLAY*TEST** | Test all character positions on display |
| 2 | Current Credit £XXX.XX | The consumer has £XXX.XX credit remaining |
| 3 | Emer Credit Left £XXX.XX | The consumer has £XXX.XX emergency credit left |
| 4 | Current Debt £XXX.XX | The consumer has used up all credit and has accumulated a debt of £XXX.XX |
| 5 | Time HH:MM | Current Time |
| 6 | Date DD/MM/YYYY | Current Date |
| 7 | Total Credit £XXX.XX | Total value of credit that has been inserted |
| 8 | Total Cards XXXXXXXXXX | Total number of cards inserted |
| 9 | Standing Charge £XXX.XX | Standing Charge per 24 hours |
| 10 | Rate 1 Unit Cost £XXX.XX | The tariff for rate 1 |
| 11 | Rate 2 Unit Cost £XXX.XX | The tariff for rate 2 |
| 12 | kWh Rate 1 XXXXXXX.X | kWh registered on rate 1 |
| 13 | kWh Rate 2 XXXXXXXXXXX | kWh registered on rate 2 |
| 14 | kWh Total XXXXXXX.X | Total kWh registered |
| 15 | Emergency Credit £XXX.XX | Emergency Credit |
| 16 | Emergency Avail £XXX.XX | If the meters prepaid credit is above this point then emergency credit is not selectable |
| 17 | S | Software/Checksum Version |

3.3 Standing Charge Collection

The standing charge is collected every 24 hours at midnight.

3.4 Rate Switching

The meter is configured to have up to 2 different rates controlled by an internal time switch.

3.5 Disconnection

The meter is configured to have up to 2 different rates controlled by an internal time switch.

3.5.1 No Remaining Credit

When the prepaid credit expires and the meter has gone into debt the main contactor will be open, thus disconnecting the power. To restore power, sufficient credit must be inserted to clear the outstanding debt. An emergency credit facility is also available to reconnect power.

3.5.2 Reverse Energy Detection

If reverse power is detected above a pre-determined level the display will indicate 'RED' (Reverse Energy Detection). Reverse detection can only be reset via the private mode switch buttons. Refer to page 10 for resetting.

3.6 Emergency Credit

If the prepaid credit is below a given limit or the meter has gone into debt, an 'Emergency Credit' facility may be invoked by pressing the RED button marked emergency credit. The meter operation whilst in emergency credit is explained in the following subsections.

3.6.1 Invocation

Emergency credit is a pre-set reserve that can be selected by pressing the RED 'Emergency Credit' button when the pre-paid credit has fallen below a given level. The display will change to £XXX.XX Emer to indicate the amount of emergency credit left to the consumer. The debt is to be repaid before the meter is back into prepaid credit. (Emer Credit Left £XXX.XX) may be viewed by pressing the display button.

3.6.2 Reduction

The amount of emergency credit remaining (Displayed as £XXX.XX Emer) will be reduced as electricity is consumed and any Standing Charge collected. The Debt will also be increased by the same amount. (Emer Credit Left £XXX.XX) and (Current Debt £XXX.XX) may be viewed by pressing the display button.

3.6.3 Expiry

When the emergency credit has fallen to zero the supply will be disconnected and the display will show £XXX.XX Debt, where £XXX.XX Debt represents the total amount owed by the customer including any Standing Charge collected. (Current Debt £XXX.XX) may be viewed by pressing the display button.

3.7 Prepayment Card Tokens

3.7.1 Valid Cards

When a valid token card is inserted its total monetary value is credited to the meter and its acceptance is indicated by the message '£XX.XX Credited' being displayed momentarily. On removal the card is erased and visibly marked. The maximum credit is limited to £999.99 at which point the display will change to Excess Credit. Three examples are given below:

Example 1:

| DISPLAY | ACTION |
|-----------------------|----------------------|
| Rate - Credit £121.99 | Insert £5 value Card |
| £5.00 Credited | |
| Rate - Credit £126.99 | |

Example 2:

| DISPLAY | ACTION |
|-------------------|----------------------|
| Debt £10.99 | Insert £5 value Card |
| £5.00 Credited | |
| Rate - Debt £5.99 | |

METER MODE

| Example 3: | |
|-------------------|----------------------|
| DISPLAY | ACTION |
| Debt £2.99 | Insert £5 value Card |
| £5.00 Credited | |
| Rate - Debt £2.01 | |
| | |

3.7.2 Card Errors

The message 'Card Error' may be displayed if the card was inserted too quickly, too slowly or the card was invalid, the message 'Excess Credit' is displayed if a token card is inserted that would cause the pre-paid credit to become greater then £999.99. If either of the above messages are displayed then on removal, the card is not erased and may be used at a later date.

3.7.3 Emergency Credit Repayment

When the preset emergency credit has expired, card tokens must be inserted that are of sufficient value to give a pre-paid credit of at least £1.00 above the emergency credit debt.

4. COMMAND CARD PROGRAMMING

4.1 Programming Method

After the insertion of a valid COMMAND CARD the following 10 parameters can be sequentially viewed/modified using the RED and GREEN buttons on the meter.

| STEP | PROGRAMMING | SETTINGS |
|------|-------------------------------|---|
| 1 | DD/MM/YYYY - HH:MM | Current Date and Time |
| 2 | Zero Credit No Yes | Manually Zero Credit - No or Yes |
| 3 | Set Credit £XXX.XX | Manually Set Credit |
| 4 | Emergency Credit £XX.XX | Emergency Credit Value |
| 5 | Emergency Credit Avail £XX.XX | Emergency Credit Available point |
| 6 | Rate 1 Unit Cost £XX.XX | Rate 1 - Cost per kWh Unit |
| 7 | Rate 2 Unit Cost £XX.XX | Rate 2 - Cost per kWh Unit |
| 8 | Standing Charge £XX.XX | Standing Charge per 24 hours |
| 9 | Operational Mode Meter Timer | Select Meter or Timer operating mode |
| 10 | Factory Defaults No Yes | Reset to Factory Defaults excluding kWh cumulative totals |

To display/modify a particular parameter first insert a COMMAND CARD upon the message 'Please Remove Card' will be displayed. On removing the card the message 'PROGRAMMING' will be displayed. Next press the RED button until the Date and Time are displayed.

Each press of the GREEN button will increment the value above the cursor. Each press of the RED button for less than 3 seconds will move the cursor one place through the programmable setting of the displayed parameter. To store the new value press the RED button for greater than 3 seconds, then on releasing the RED button the next parameter for programming will be displayed. If no buttons are pressed within 10 seconds the display will revert to its normal operation mode without saving the new value.

Example: To change the value on Rate 1 Unit Cost the sequence of events will be as follows:

| STEP | ACTION | DISPLAY | |
|------|---|-----------------------------------|--|
| 1 | Insert a valued COMMAND Card | Please Remove Card | |
| 2 | Remove COMMAND card | PROGRAMMING | |
| 3 | Press and release the RED button for less than 3 seconds | Date and Time DD/MM/YY HH:MM | |
| 4 | Press and hold the RED button for greater than 3 seconds to store the value | Date and Time DD/MM/YY HH:MM | |
| 5 | Press and hold the RED button for greater than 3 seconds to store the value | Zero credit No Yes | |
| 6 | Press and hold the RED button for greater than 3 seconds to store the value | Set Credit £XXX.XX | |
| 7 | Press and hold the RED button for greater than 3 seconds to store the value | Emergency Credit £XXX.XX | |
| 8 | Press and hold the RED button for greater than 3 seconds to store the value | Emergency Credit Avail £XXX.XX | |
| 9 | Press and release the GREEN button until the correct value is shown | Rate 1 Unit Cost £XXX.XX | |
| 10 | Press and release the RED button for less than 3 seconds to move the cursor one place through the programmable setting of the displayed parameter | Rate 1 Unit Cost £XXX.XX | |
| 11 | Press and hold the RED button for greater than 3 seconds to store the settings | Rate 1 Unit Cost £XXX.XX | |
| 12 | Press and hold the RED button for greater than 3 seconds to store the settings | Rate 2 Unit Cost £XXX.XX | |
| 13 | Press and hold the RED button for greater than 3 seconds to store the settings | Standing Charge £XXX.XX | |
| 14 | Press and hold the RED button for greater than 3 seconds to store the settings | Operational Mode Meter Timer | |
| 15 | Press and hold the RED button for greater than 3 seconds to store the settings | Factory Defaults No Yes | |
| 16 | | Exiting Programming | |

METER MODE

4.2 Factory Defaults Reset

| DISPLAY | REMARKS | | FACTORY DEFAULTS | |
|--|--|---|---------------------|--|
| Factory | If Factory Defaults are reset then the following parameters are changed: | | | |
| Defaults | а | Current Credit | £0.00 | |
| | b | Emergency Credit Left | £1.00 | |
| No Yes c | | Current Debt | £0.00 | |
| | d | Total Credit | £0.00 | |
| | е | Total Cards | 0 | |
| f Standing Charge per 24 hoursg Rate 1 unit costh Rate 2 unit cost | | Standing Charge per 24 hours | £0.00 | |
| | | Rate 1 unit cost | £0.15 | |
| | | Rate 2 unit cost | £0.15 | |
| | i | Emergency Credit Value | £1.00 | |
| | j | Emergency Credit availability point | £0.50 | |
| | k | Reverse Energy Detection "RED" when displayed | "RED" Not Displayed | |

4.3 Date and Time

The following date and time parameters are settable: Day, Month, Year, Hours, Minutes

4.4 Zero Credit

Manually reset Debt and Credit to zero.

4.5 Set Credit

Manually set credit in the range of £0 to £999.99.

4.6 Emergency Credit Value

The emergency credit is settable in the range of £0 to £99.99.

4.7 Emergency Credit Available Point

The emergency credit available point is settable in the range of £0 to £99.99.

4.8 Cost per Unit for Rate 1 and 2

The cost per unit of electricity for each of the 2 rates is settable in the range £0 to £99.99.

4.9 Standing Charge per 24 hours

The standing charge is settable in the range $\pounds 0$ to $\pounds 99.99$ and is factory set to deduct the value set every 24 hours at midnight.

4.10 Operational Mode Meter Timer

The meter mode setting operates at cost per kWh unit of electricity or timer mode at cost per time of electricity.

5. APPENDIX

5.1 Starting Current

The meter starts to register at 80 mA.

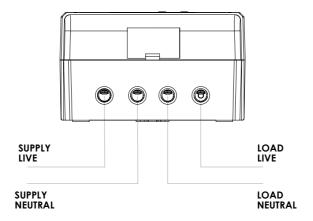
5.2 Wiring Diagram and Mounting Template (shown overleaf)

The meter must be installed by a competent, qualified electrician to the standards that satisfy the requirements of the current Institute of Electrical Engineers (IEE).

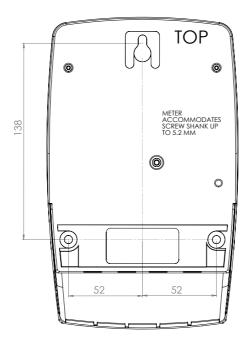
Visit: www.rdlmeters.com

WIRING DIAGRAM AND MOUNTING TEMPLATE

WIRING DIAGRAM



WALL MOUNTING TEMPLATE



1. INTRODUCTION

1.1 Overview

This document covers the specification and operation of the MCM-030 single phase prepayment magnetic card operated electricity meter and timer for operating in TIMER MODE.

The main features of the product are:

- All solid state with 2 x 16 character LCD
- Uses secure disposable magnetic token cards
- > When valid token card is inserted, time credit is copied from the card to the timer
- Multiple cards may be entered in one session
- Card is erased and permanently marked
- Card timer display counts down in hours, minutes and seconds
- User settable duration of 0 to 599 minutes
- Programming command card allows settings to be easily changed
- Tournament Mode Override
- Switches up to 100A
- No battery replacement required
- Internal Real Time Clock with programmable switching
- Reverse Energy Detection

2. TECHNICAL DATA

The MCM-030 is an alternating Current Static Watt Hour Meter, Class B, with programmable timer function facility.

2.1 Meter LED & Power Registration Security

The red LED mounted on the front panel will pulse at a rate of 1000 pulses per kWh. Power registration is recorded in non-volatile memory under control of the microprocessor which is updated every 24 hours and in the event of a power failure. There are separate registers for each rate.

2.2 Main Contactor

| Contactor Current Rating: | 100 Amps |
|---------------------------|----------------|
| Terminal Arrangement: | BS 7856 |
| Main Terminal Dimensions: | 8.0mm to 8.2mm |
| Terminal Construction: | Solid Brass |

2.3 Power Supply

| Rated Voltage: | .230V |
|--------------------------|--------------------------|
| Operating Voltage Range: | .220V-240V, Maximum 276V |
| Current Range: | |
| Frequency: | .50Hz Standard |

2.4 Metrology

| Timer Accuracy: | | 1% |
|-----------------|--|----|
|-----------------|--|----|

2.5 Environmental

| Temperature Operating Range: | 25 to 55 degrees C |
|------------------------------|--------------------|
| Storage Range: | 25 to 55 degrees C |
| Transportation Range: | 25 to 70 degrees C |
| Ingress Protection: | IP51 |

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2.6 Dimensions

| Height: | |
|---------|----------|
| Width: | |
| Depth: | 80.00 mm |
| | |

3. NORMAL FUNCTIONAL OPERATION IN TIMER MODE

3.1 Normal Operation Display

During normal operation the display on the MCM-030 in TIMER MODE will be one of those shown below.

| DISPLAY | CONTACTOR | REMARKS |
|-----------------------------|-----------|--|
| Timer Countdown 00:00:00 | Open | The consumer has used up all credit |
| Timer Countdown HH:MM:SS | Closed | The consumer has HH:MM:SS credit remaining |
| Tournament Mode Enabled | Closed | In this mode the timer dispenses electricity without the consumer needing to enter cards |

3.2 Additional Displayed Information

When the timer is operating normally, momentarily pressing the GREEN button will sequence through the parameters, as listed in the table overleaf. If during a manual sequence cycle, the GREEN button is not pressed within 10 seconds, the meter will revert to its normal display and operation. **The table below gives a list of the 8 sequentially displayed parameters.**

| STEP | DISPLAY | REMARKS |
|------|--------------------------------------|---|
| 1 | **DISPLAY*TEST** **DISPLAY*TEST** | Test all character positions on display |
| 2 | Token Minutes xxx | Amount of time credited for each token card inserted |
| 3 | Maximum Minutes xxxx | Maximum amount of time that can be credited by the consumer |
| 4 | Total Tokens xxxxxxxxxx | Total number of cards inserted |
| 5 | Total Seconds | Total time of credit that has been inserted |
| 6 | Time HH:MM | Current Time |
| 7 | Date DD/MM/YYYY | Current Date |
| 8 | | Software Version |

3.3 Tournament Mode Override

In this mode the timer dispenses electricity without the consumer needing to enter token cards.

3.4 Disconnection

3.4.1 No Remaining Credit

When the prepaid credit expires the timer main contactor will be open, thus disconnecting the power. To restore power and restart the timed cycle, token cards must be inserted.

3.4.2 Reverse Energy Detection

If reverse power is detected above a pre-determined level the display will indicate 'RED' (Reverse Energy Detection). Reverse detection can only be reset via the command card.

3.5 Prepayment Card Tokens

3.5.1 Valid Cards

When a valid token card is inserted, time is credited to the timer and its acceptance is indicated by the message 'XXXX Token' being displayed momentarily. On removal the card is erased and visibly marked. The maximum credit is limited to 1440 minutes at which point the display will change to Maximum Reached. Three examples are given below:

Example 1:

| DISPLAY | ACTION |
|--------------------------|--------------------------------|
| Timer Countdown 00:00:00 | Insert value One Token Card |
| One Token | 1 x Set time credited to timer |

Example 2:

| DISPLAY | ACTION |
|--------------------------|--------------------------------|
| Timer Countdown 00:00:00 | Insert value Five Token Card |
| Five Token | 5 x Set time credited to timer |

Example 3:

| DISPLAY | ACTION |
|--------------------------|---------------------------------|
| Timer Countdown 00:00:00 | Insert value Ten Token Card |
| Ten Token | 10 x Set time credited to timer |

3.5.2 Card Errors

The message 'CARD ERROR' may be displayed if the token card was inserted too quickly, too slowly or the token card was invalid, the message 'Maximum Reached' is displayed if a token card is inserted that would cause the pre-paid credit to become greater than Maximum Time hh:mm set. If either of the above messages are displayed then on removal, the card is not erased and may be used at a later date.

4. COMMAND CARD PROGRAMMING

4.1 Programming Method

After the insertion of a valid COMMAND CARD the following 7 parameters can be sequentially viewed/modified using the RED and GREEN buttons of the timer.

| STEP | PROGRAMMING | SETTINGS | |
|------|--|---|--|
| 1 | DD/MM/YYYY - HH:MM | Current Date and Time | |
| 2 | Zero Timer No Yes | Manually Zero Timer - No or Yes | |
| 3 | Token hh:mm Time credited for each token card inserted | | |
| 4 | Max Time hh:mm | Maximum time which can be credited | |
| 5 | Tournament Mode No Yes | Select Tournament Mode - No or Yes | |
| 6 | Operational Mode Meter Timer | Select Meter or Timer mode | |
| 7 | Factory Defaults No Yes | Reset to Factory Defaults excluding kWh cumulative totals | |

To display/modify a particular parameter first insert a COMMAND CARD upon the message "Please Remove Card" will be displayed. On removing the card the message 'PROGRAMMING' will be displayed. Next press the RED button until the Date and Time are displayed.

Each press of the GREEN button will increment the value above the cursor.

Each press of the RED button for less than 3 seconds will move the cursor one place through the programmable setting displayed parameter. To store the new value press the RED button for greater than 3 seconds, then on releasing the RED button the next parameter for programming will be displayed. If no buttons are pressed within 10 seconds the display revert to its normal operation mode without saving the new value.

Example: (shown overleaf)

To change the amount of time credited for each token card inserted the sequence of events will be as follows:

TIMER MODE

| STEP | ACTION | DISPLAY | |
|------|---|---------------------------------|--|
| 1 | Insert a valued COMMAND Card | Please Remove Card | |
| 2 | Remove COMMAND Card | PROGRAMMING | |
| 3 | Press and release the RED button for less than 3 seconds | Date and Time DD/MM/YY HH:MM | |
| 4 | Press and release the RED button for greater than 3 seconds to store the value | Date and Time DD/MM/YY HH:MM | |
| 5 | Press and hold the RED button for greater than 3 seconds to store the value | Zero Time Credit No Yes | |
| 6 | Press and release the GREEN button until the correct value is shown | Token hh:mm XX:XX | |
| 7 | Press and release the RED button for less than 3 seconds to move the cursor one place through the programmable setting of the displayed parameter | Token hh:mm £XX:XX | |
| 8 | Press and release the RED button for greater than 3 seconds to store the value | Token hh:mm £XX:XX | |
| 9 | Press and release the RED button for greater than 3 seconds to store the value | Max Time hh:mm 10:00 | |
| 10 | Press and release the RED button for greater than 3 seconds to store the value | Tournament Mode No Yes | |
| 11 | Press and release the RED button for greater than 3 seconds to store the value | Operational Mode Meter Timer | |
| 12 | Press and hold the RED button for greater than 3 seconds to store the settings | Factory Defaults No Yes | |
| 13 | | Exiting Programming | |

4.2 Factory Default Reset

| DISPLAY | R | EMARKS | FACTORY DEFAULTS | |
|----------|--|---|---------------------|--|
| Factory | If Factory Defaults are reset then the following parameters are changed: | | | |
| Defaults | а | Zero Timer Credit | 00:00:00 | |
| | b | Token Minutes | 60 | |
| No Yes | с | Max Time Minutes | 600 | |
| | d | Total Tokens | 0 | |
| | е | Total Seconds | 0 | |
| | f | Reverse Energy Detection "RED" when displayed | "RED" Not Displayed | |

4.3 Date and Time

The following date and time parameters are settable: Day, Month, Year, Hours, Minutes.

4.4 Zero Time Credit

Manually reset credit to zero.

4.5 Token Value

The amount of time credited for each token card inserted is settable in the range 0 to 599 minutes.

4.6 Maximum Time

The maximum credit is settable in the range 0 to 1440 minutes at which point the display will change to Maximum Reached.

4.7 Tournament Mode Override

In this mode the timer dispenses electricity without the consumer needing to enter token cards.

4.8 Operational Mode Meter or Timer

The timer mode setting operates at cost per time of electricity or meter mode at cost per kWh unit of electricity.

5. APPENDIX

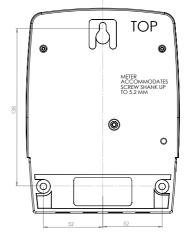
5.1 Wiring Diagram and Mounting Template (shown overleaf)

This timer must be installed by a competent, qualified electrician to the standards that satisfy the requirements of the current Institute of Electrical Engineers (IEE).



SUPPLY LOAD NEUTRAL LOAD

WALL MOUNTING TEMPLATE



DECLARATION OF CONFORMITY

Meter Model: MCM-030 Magnetic Card Meter

This Declaration of Conformity applies to Meter Serial Number:



EU DECLARATION OF CONFORMITY

RDL Meters Ltd.

Unit E2, Westfield Business Park Long Road Paignton TQ4-7AU United Kingdom

This declaration of Conformity is issued under the sole responsibility of RDL Meters Ltd.

The fulfilment of the essential requirements set out in Annex I and in the relevant instrument specific Annexes has been demonstrated.

RDL Meters Ltd declares that the new Measuring Instrument described hereafter as MCM-030 Magnetic Card Meter is in conformity with the provisions of EU Measurement Instrument Directive 2014/32/EU.

The object of the declaration is in conformity with the relevant Union harmonized legislation. BS EN 50470-1:2006 & BS EN 50470-3:2006. 0598.

Is subject to the procedure set out in Module D of the Directive 2014/32/EU under the supervision of SGS Fimko Ltd Notified Body No. 0598.

Verified at RDL Meters Ltd, Paignton

Date:

.....

Peter Gibbs - Technical Director RDL Meters Ltd

DECLARATION OF CONFORMITY

Meter Model: MCM-030 Magnetic Card Meter

This Declaration of Conformity applies to Meter Serial Number:



MIR 2016 DECLARATION OF CONFORMITY

RDL Meters Ltd.

Unit E2, Westfield Business Park Long Road Paignton TQ4-7AU United Kingdom

This declaration of Conformity is issued under the sole responsibility of RDL Meters Ltd.

RDL Meters Ltd declares that the new Measuring Instrument described hereafter as MCM-030 Magnetic Card Meter is in conformity with the provisions of UK Measuring Instruments Regulations 2016.

The object of the declaration is in conformity with the relevant statutory requirements. BS EN 50470-1:2006 & BS EN 50470-3:2006.

It is identical to the Measuring Instrument which is the subject of MIR 2016 type examination certificate number 0120/SGS0260 issued by SGS UK Ltd Approved Body No. 0120.

Is subject to the regulations as set out in Module D of the Measuring Instruments Regulations 2016 under the supervision of SGS UK Ltd Approved Body No. 0120.

Verified at RDL Meters Ltd, Paignton

Date:

.....

Peter Gibbs - Technical Director RDL Meters Ltd



ESTABLISHED 1976



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