

# Clarke®

## Start··charge



## AUTOMATIC BATTERY CHARGER

MODEL NO: AC80

PART NO: 6266315

## OPERATION & MAINTENANCE INSTRUCTIONS

UK  
CA | CE



ORIGINAL INSTRUCTIONS

DL0922 Rev 3

---

## INTRODUCTION

---

Thank you for purchasing this CLARKE Battery Charger.

Please read this manual thoroughly, before attempting to operate, and carefully follow all instructions given.

It is vitally important that ALL precautions are taken, as specified, which will not only provide protection for yourself and that of others around you, but will also ensure that the Battery Charger will give you long and satisfactory service.

**This battery charger is limited to use with 12V lead acid/ gel including MF (Sealed) and Leisure batteries ONLY. DO NOT attempt to charge other types of battery.**

---

## GUARANTEE

---

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

---

## ENVIRONMENTAL RECYCLING POLICY

---



Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

---

## SAFETY PRECAUTIONS

---

- **IMPORTANT:** ALWAYS disconnect the battery from the vehicle BEFORE connecting the charger leads. This is to prevent damage being caused to the vehicle electronic system.
  - This battery charger is designed for INDOOR use ONLY. Do not use outdoors, exposed to the elements.
  - Do not use for any other type of battery, or supply power to low voltage electrical systems.
  - Connect the battery clamps to the battery terminals before plugging the charger in to the mains power supply.
  - This battery charger is limited to use with 12V lead acid/ gel including MF (Sealed) and Leisure batteries ONLY. DO NOT attempt to charge other types of battery.
  - Do not attempt to charge a battery with a capacity exceeding that indicated in the 'Specifications'.
  - Do not operate the charger if any of the cables are damaged. Consult your Clarke dealer for repair or replacement of the parts.
  - Do not operate the charger if the case is damaged. Consult your Clarke dealer for inspection and repair.
  - Do not disassemble the charger, incorrect reassembly may result in electric shock or fire.
  - Ensure the battery posts and battery clamps are perfectly clean before use.
  - Disconnect from the mains power supply before making or breaking connections to the battery.
  - Make sure the battery is topped up with distilled water, (where applicable), to its proper level, before connecting the charger.
  - Unscrew the battery filler caps fully, (where applicable), and leave them loose for the duration of charge, to ensure that gases are allowed to escape.
- NOTE:** ALWAYS clean around the filler caps thoroughly before unscrewing, to ensure that no dirt can enter the battery cell. Ensure the breather holes, in the caps, are perfectly clear before screwing in again.
- When charging is complete, disconnect the negative cable first and then the positive cable.
  - Always place the charger in an environment which is
    - *well ventilated*
    - *out of the reach of children*
    - *not exposed to direct sunlight or heat source*

- away from water / moisture, oil and grease
- away from explosive gases, flames, and sparks
- away from any flammable substance

---

## ELECTRICAL CONNECTIONS

---

### **THIS APPLIANCE IS DOUBLE INSULATED**

This appliance is fitted with a 13 amp, BS 1363 plug which should be connected to a standard 230 VAC (50Hz) electrical supply. If the plug is replaced, the replacement must be to the same specification and wired in accordance with the following code:

Blue - Neutral

Brown - Live

As the colours of the flexible cord of this appliance may not correspond with the coloured markings identifying terminals in your plug proceed as follows:

- Connect BROWN cord to terminal marked with a letter "L" or coloured RED
- Connect BLUE cord to terminal marked with a letter "N" or coloured BLACK

If in doubt, consult a qualified electrician.

In the event a moulded plug is fitted, and is subsequently cut from the electric cable, the replacement plug MUST be an approved 5 amp, BS 1363 plug and wired in accordance with the above instructions. Additionally, please note:

The discarded plug must be thrown away as there is a danger of electric shock if it is subsequently inserted into a socket outlet.

1. Never use the plug without the fuse cover fitted.
2. Should you wish to replace a detachable fuse carrier, ensure that the correct replacement is used (as indicated by marking or colour code).
3. Replacement fuse covers can be obtained from your local dealer or most electrical stockists.

### **FUSE REPLACEMENT**

The fuse in the plug must be replaced with one of the same rating (5 amps) and this replacement must be ASTA or BSI approved to BS1362.

### **EXTENSION CABLES**

If an extension cable is used, the conductors in the cable MUST be a minimum 1.5mm<sup>2</sup>. Additionally, ensure the cable is completely unwound from the drum.

---

## USING THE CHARGER

---

This model is a fully automatic charger (will shut off when fully charged) for any type of battery up to a capacity of 15-120AH.

This charger will not charge a totally flat battery, the battery must be able to supply a minimum of 3 Volts before charging will commence.

LED's on the front panel from top to bottom:

GREEN	Battery is fully charged. The charger may be left connected if required, it will provide a top up charge as and when necessary
YELLOW	Battery not fully charged, charging will commence when the charger is connected to mains power
GREEN	Mains supply is ON.
RED	Polarity warning, if this lights up the clamps connected to the battery should be reversed.

### DISCONNECT THE BATTERY FROM THE VEHICLE

If the battery is still in the vehicle, ensure the battery terminals are disconnected from the vehicles electrical system. Disconnect the negative (EARTH) terminal first, followed by the positive terminal. (When reconnecting, do so in reverse order).

### CONNECT THE CHARGER TO THE BATTERY

1. Connect the red battery clamp to the positive (+ve) battery terminal.
2. Connect the black clamp to the negative (-ve) terminal.
  - Make sure that both connections are secure and NOT touching each other.
3. Select the battery type (normal or gel cell) using the selector switch.
4. Select the charging speed required (trickle charge or fast charge).

### CHARGE THE BATTERY

1. Plug in the charger and switch ON at the mains supply to commence charging.
  - When charging is complete, the green Fully Charged LED will light up. The charger may be left connected, it will monitor the battery and provide a top up charge when necessary.

### DISCONNECTING THE CHARGER

1. Switch OFF at the mains supply
  - Remove the black clamp from the negative (-ve) terminal first,
  - Then remove the red clamp from the positive (+ve) terminal.
2. Reconnect the battery to the vehicle.

---

## SAFETY FEATURES

---

Whenever a fault condition exists, the circuitry automatically disengages the normal operation of the charger.

### **THERMAL OVERLOAD**

The thermal overload protector provides a safeguard against an excessively large charging current being drawn by the battery for prolonged periods.

### **SHORT CIRCUIT**

The charger is fully protected against short circuits, i.e. the clamps coming into contact, directly or indirectly when the unit is switched ON. If a short circuit happens, the charger will switch off, and return to normal after one or two minutes.

### **REVERSE POLARITY**

The charger is fully protected against the possibility of the clamps being incorrectly connected. If the Polarity Warning LED illuminates the clamps connected to the battery should be reversed.

---

## SPECIFICATIONS

---

Model	AC80
Input Voltage	230V @ ~50Hz
Battery Voltage:	12V
Rated charging current: (DC)	2.5A (Trickle), 5.6A (Fast)
IP Rating:	IP20
Minimum battery size: (Ah/CCA)	15 (Ah/CCA)
Maximum battery size: (Ah/CCA)	120 (Ah/CCA)
Operating Temperature Range: (°C)	-10 to 45°C
Compatible battery types:	Lead acid/ gel including MF (Sealed) and Leisure batteries
Dimensions (D x W x H)	100 x 180 x 230 mm
Weight (kg)	2.8
Part Number	6266315

# DECLARATION OF CONFORMITY



Hemnal Steel, Epping, Essex CM16 4LG

## DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following statutory requirement(s):

*Electromagnetic Compatibility Regulations 2016*  
*Electrical Equipment (Safety) Regulations 2016*  
*The Restriction of the Use of Certain Hazardous Substances in Electrical Electronic Equipment Regulations 2012*

The following standards have been applied to the product(s):

EN 55014-1:2006+A1+A2, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013,  
EN 60335-1:2012+A11, EN 60335-2-29:2004+A2, EN 62233:2008, IEC 62321-2:2013,  
IEC 62321-3-1:2013, IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-6:2015,  
IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017.

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The UKCA mark was first applied in: 2022

Product Description: 12V Battery charger

Model number(s): AC80

Serial / batch Number: N/A

Date of Issue: 26/09/2022

Signed:

J.A. Clarke  
Director



Fitzwilliam Hall, Fitzwilliam Place, Dublin 2

## DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

2014/30/EU *Electromagnetic Compatibility Directive*  
2014/35/EU *Low Voltage Directive*  
2011/65/EU *Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment Directive*

The following standards have been applied to the product(s):

EN 55014-1:2006+A1+A2, EN 55014-2:2015, EN 61000-3-2:2014, EN 61000-3-3:2013,  
EN 60335-1:2012+A11, EN 60335-2-29:2004+A2, EN 62233:2008, IEC 62321-2:2013,  
IEC 62321-3-1:2013, IEC 62321-4:2013+A1:2017, IEC 62321-5:2013, IEC 62321-6:2015,  
IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017.

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2012

Product Description: 12V Battery charger

Model number(s): AC80

Serial / batch Number: N/A

Date of Issue: 26/09/2022

Signed:

J.A. Clarke  
Director

# A SELECTION FROM THE VAST RANGE OF

# Clarke®

## QUALITY PRODUCTS



**AIR COMPRESSORS**  
From DIY to industrial, Plus air tools, spray guns and accessories.

**GENERATORS**  
Prime duty or emergency standby for business, home and leisure.

**POWER WASHERS**  
Hot and cold, electric and engine driven - we have what you need

**WELDERS**

Mig, Arc, Tig and Spot.  
From DIY to auto/industrial.

**METALWORKING**  
Drills, grinders and saws for DIY and professional use.

**WOODWORKING**  
Saws, sanders, lathes, mortisers and dust extraction.

**HYDRAULICS**  
Cranes, body repair kits, transmission jacks for all types of workshop use.

**WATER PUMPS**  
Submersible, electric and engine driven for DIY, agriculture and industry.

**POWERTOOLS**  
Angle grinders, cordless drill sets, saws and sanders.

**STARTERS/CHARGERS**  
All sizes for car and commercial use.



## PARTS & SERVICE: 0208 988 7400

**Parts Enquiries**  
[Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)

**Servicing & Technical Enquiries**  
[Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)

SALES: UK 01992 565333 or Export 00 44 (0)1992 565335

**Clarke** INTERNATIONAL Hemnall Street, Epping, Essex CM16 4LG  
[www.clarkeinternational.com](http://www.clarkeinternational.com)