

CLARKE[®]

CONTRACTOR[™]



1200W HAMMER DRILL

MODEL NO: CON1200

PART NO: 6479505



**OPERATING & MAINTENANCE
INSTRUCTIONS**

GC0115

INTRODUCTION

Thank you for selecting this CLARKE Hammer Drill.

Before attempting to operate the machine, it is essential that you read this manual thoroughly and carefully follow all instructions given. In doing so you will ensure the safety of yourself and that of others around you, and you can also look forward to the machine giving you long and satisfactory service.

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 its intended purpose.

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 PROTECTION

Through purchase of this product, the customer is taking on the obligation to deal with the Waste Electrical and Electronic Equipment (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.

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GENERAL SAFETY RULES

WORK AREA

1. **Keep the work area clean and well lit.** Cluttered and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres such as in the presence of flammable liquids, gasses or dust.** Power tools create sparks which may ignite dust or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

1. **Power tools must match the power outlet. Never modify the plug in any way. Do not use adaptor plugs with earthed (grounded) power tools.** Correct plugs and outlets will reduce the risk of electric shock.
2. **Do not expose power tools to rain or wet conditions.** Any water entering power tools will increase the risk of electric shock.
3. **Do not abuse the electrical cable. Never use the cord for pulling or unplugging the power tool. Keep the cable away from sources of heat, oil, sharp edges or moving parts.** Damaged or tangled cables increase the risk of electric shock.
4. **When operating a power tool outdoors, use an extension cable suitable for outdoor use.** Using the correct cable reduces the risk of electric shock.

PERSONAL SAFETY

1. **Stay alert, watch what you are doing and use common sense when you are operating a power tool.** Do not operate a power tool when you are tired, ill or under the influence of alcohol, drugs or medication.
2. **Wear personal protective equipment including eye protection.** Safety equipment such as a dust mask, non-skid shoes or hearing protection used for appropriate conditions will reduce personal injuries. Use a face or dust mask if operation is particularly dusty. Wear ear protectors/defenders as the noise level of this machine can exceed 85dB (A).
3. **Do not over-reach.** Keep your proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
4. **Avoid accidental starting of the machine.** Ensure the switch is in the off position and the trigger lock button disengaged before plugging the machine in to the power supply. Carrying power tools around with your

finger on the trigger or plugging in power tools that are switched on invites accidents.

5. **Dress properly.** Do not wear loose clothing or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair. For best footing, wear rubber soled footwear. Keep floor clear of oil, scrap wood, etc.
6. Concentrate on the job in hand, no matter how trivial it may seem. Be aware that accidents are caused by carelessness due to familiarity.
7. Switch the machine OFF immediately after the task is completed.

POWER TOOL USE AND CARE

1. **Do not force the machine.** Use the correct power tool for your application. It will do a better and safer job at the rate for which it was designed.
2. **Do not use the power tool if the trigger does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
3. **Disconnect the power tool from the power supply before making any adjustments, changing accessories, or storing the tool.** These measures will reduce the risk of the power tool starting accidentally.
4. **Store power tools out of the reach of children and do not allow persons unfamiliar with these instructions to operate the power tool.** Power tools are potentially dangerous in the hands of untrained users.
5. **Maintain power tools in top condition.** Keep tools/ machines clean for the best and safest performance. Check for misalignment or binding of moving parts, broken parts, or any condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
6. **Use recommended accessories.** The use of improper accessories could be hazardous.
7. **Machine cleanliness.** Do not allow the ventilation slots in the machine to become blocked with dust.
8. **Check the power tool for damage before using the machine.** Any damaged part should be inspected to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, breakage of parts, mountings, and any other condition that may affect the machines operation. Any damage should be properly repaired or the part replaced. If in doubt, **DO NOT** use the machine. Consult your local dealer.
9. **When necessary, have your power tools serviced or repaired by a qualified person using identical replacement parts.** This will ensure that the safety of the power tool is maintained.

HAMMER DRILL SAFETY INSTRUCTIONS

1. Only use the hammer drill in the manner and for the functions described in these instructions.
2. Using the correct bit. Use the appropriate drill bit for the material being drilled. Different bits are available from your Clarke dealer.
3. Use of the mains cable. Keep the mains cable well away from the drill and ensure an adequate electrical supply is close at hand so that the operation is not restricted by the length of the cable.
4. Working on the bench. Allow sufficient clearance beneath the work to ensure the drill bit does not come into contact with the floor, table etc.
5. Switching off. Never place the drill on a table or bench if it has not completely stopped. The drill bit will continue to rotate for a short time after the trigger has been released to stop the drill.
6. Drilling into walls. Do not drill into walls or cavities before checking for hidden electrical wires or water pipes etc.
7. Finishing drilling. Do not touch the drill bit immediately after use. Allow time for it to cool.
8. Use outdoor extension leads. If working outdoors, always use an approved cable extension suitable for the power rating of this tool (see specifications), the conductor size should also be at least the same size as that on the machine, or larger. When using a cable reel, always unwind the cable completely. We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD).
9. Cooling agents. When drilling metals, always use a cooling agent i.e. cutting/soluble oil.

Please keep these instructions in a safe place for future reference.

ELECTRICAL CONNECTIONS



WARNING! READ THESE ELECTRICAL SAFETY INSTRUCTIONS THOROUGHLY BEFORE CONNECTING THE PRODUCT TO THE MAINS SUPPLY.

Before switching the product on, make sure that the voltage of your electricity supply is the same as that indicated on the rating plate. This product is designed to operate on 230VAC 50Hz. Connecting it to any other power source may cause damage.

This product may be fitted with a non-rewireable plug. If it is necessary to change the fuse in the plug, the fuse cover must be refitted. If the fuse cover becomes lost or damaged, the plug must not be used until a suitable replacement is obtained.

If the plug has to be changed because it is not suitable for your socket, or due to damage, it should be cut off and a replacement fitted, following the wiring instructions shown below. The old plug must be disposed of safely, as insertion into a mains socket could cause an electrical hazard.

CVAC20SS/CVAC25SS (DOUBLE INSULATED APPLIANCE)

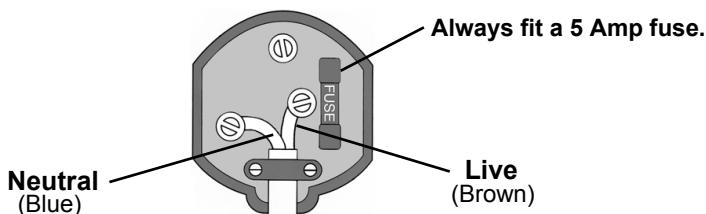


**WARNING! THE WIRES IN THE POWER CABLE OF THIS PRODUCT ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:
Blue = Neutral Brown = Live**

If the colours of the wires in the power cable of this product do not correspond with the markings on the terminals of your plug, proceed as follows.

- The wire which is coloured **Blue** must be connected to the terminal which is marked **N** or coloured **Black**.
- The wire which is coloured **Brown** must be connected to the terminal which is marked **L** or coloured **Red**.

Plug must be BS1363/A approved.



Ensure that the outer sheath of the cable is firmly held by the clamp

We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD).

OVERVIEW



The CON1200 is a variable-speed drill, equipped with an adjustable speed controller, high and low gear selection and hammer operation and has a lock-on button for continuous operation. The drill is supplied with a depth stop rod and auxiliary handle.

This CON1200 Drill is supplied with the following components:

- 1 x Chuck Key
- 1 x Depth Stop Rod
- 1 x Auxiliary Side Handle

When unpacking, check for damage or shortages etc. Any found should be reported to your CLARKE dealer where the appliance was originally purchased.

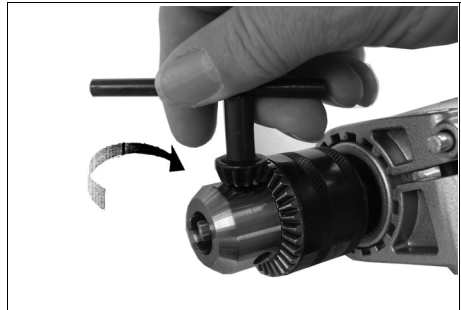
OPERATION



WARNING: REMOVE THE CHUCK KEY BEFORE OPERATING THE DRILL. TO AVOID ACCIDENTAL STARTING, ENSURE THE DRILL IS SWITCHED OFF BEFORE PLUGGING INTO THE MAINS. TO DO THIS, BRIEFLY PULL THE SWITCH AND RELEASE, TO ENSURE THE TRIGGER LOCK IS NOT SET IN THE 'LOCK' POSITION.

INSERTING A DRILL BIT

1. Open the chuck by rotating the chuck sleeve anticlockwise until the jaws are open sufficiently to take the drill bit.
2. Place the drill bit in the jaws of the chuck as far as it will go.
3. Insert the chuck key in one of the three holes in the chuck and tighten in a clockwise direction.
 - Ensure the head of the chuck key is firmly located on the cog barrel of the chuck when tightening.
 - To remove the bit, release by inserting the chuck key in one of the holes and turning in an anticlockwise direction.



SWITCHING ON & CONTINUOUS OPERATION

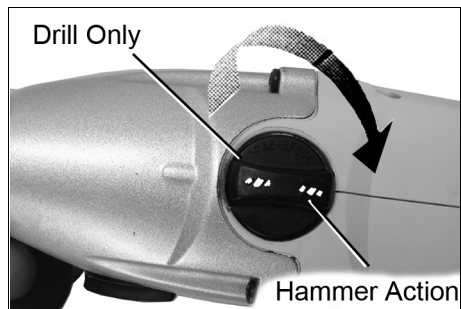
1. Plug into a 13 amp socket and squeeze the trigger to start the drill.
2. During use, press the trigger lock-on button & the drill will run continuously. Squeeze the trigger again briefly to release the trigger lock & stop the drill.

HAMMER DRILL SELECTION

Rotate the 'Drill/Hammer Drill' mode selection switch so that the 'Hammer' symbol is aligned with the raised mark on the drill body.

NORMAL DRILL SELECTION

Rotate the drill/hammer drill mode selection switch so that the 'Drill' symbol is aligned with the raised mark on the drill body.

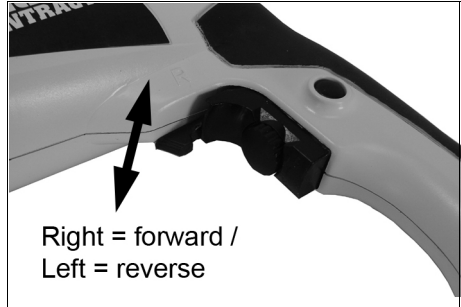


NOTE: NOTE: Both these operations should only be performed when the drill is at a complete stop

FORWARD / REVERSE SELECTION

1. Set the forward/reverse selector switch to the position marked 'R' for normal 'Right hand' rotation.
2. Set the forward/reverse selector switch to the right hand position marked 'L' for 'Left hand' rotation.

NOTE: This should only be performed when the drill is at a complete stop.

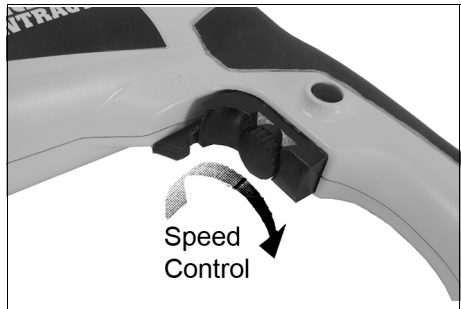


SPEED SELECTION

1. Set the high or low speed by selecting one of the two gear speeds (1-low or 2-high) with the selector.
- Turn the speed selector knob until the chosen number is aligned with the arrow on the drill body).

NOTE: This should only be performed when the drill is at a complete stop.

- Variable speeds may be selected by turning the speed control in the centre of the trigger.



AUXILIARY HANDLE & DEPTH STOP

1. Fit the depth stop along with the auxiliary handle.
 - This can only be used if the handle is installed.
2. Slide the handle assembly over the chuck and onto the body of the drill. Insert the depth stop rod into the holder in the handle assembly, rotate the handle to the desired position and secure in position by twisting the handle grip clockwise, DO NOT overtighten.



- To set the depth stop, loosen the handle by turning the handle grip anticlockwise and slide the rod in or out to the required position.
- The scale markings on the rod are for reference only.

GENERAL DRILLING TECHNIQUE

After drilling material to the full depth, maintain chuck rotation to ease drill withdrawal.

Keep drill bits sharpened for optimum performance.

Always drill directly in line with the bit. Do not use sideways movement as this may damage the drill or cause the bit to break.

Always use a cutting lubricant when drilling metals except for brass and cast iron which should be drilled dry.

If the drill is not cutting the metal then sharpen the drill bits, ensuring the various cutting angles are correct.

MAINTENANCE

Before commencing any maintenance procedures, always ensure the drill is isolated from the electrical supply by switching off and removing the plug from the socket.

BEFORE USE

1. Ensure all fixing screws remain tight to ensure the drill is in safe working condition.
2. Inspect the power cable to ensure it is sound and free from cracks, bare wires etc.

CLEANING

1. Ensure all air ventilation slots are clear of blockages, (use compressed air to clean the machine if possible).
2. After use, clean all dust and swarf from the drill.
3. Clean the exterior of the drill with a soft cleaning cloth. Never use any chemicals or harsh abrasives to clean the tool.
4. Avoid using solvents when cleaning plastic parts, most plastics are susceptible to damage from the various types of commercial solvents.

GENERAL MAINTENANCE

All bearings etc, in this tool are lubricated with a sufficient amount of high grade lubricant for the tools lifetime under normal operating conditions, therefore no further lubrication is necessary.

Refer to your CLARKE dealer if internal maintenance is required.

FAULTFINDING

Problem	Possible Cause	Remedy
Tool will not operate	No power supply.	Check supply & rectify as necessary.
	Faulty switch	Consult your Clarke dealer
	Fuse blown	Check & replace if necessary
	Faulty motor	Consult your Clarke dealer
Motor runs but drill bit does not move.	Drill fastening not tight.	Secure drill bit.
	Drive gear broken.	Consult your Clarke dealer
Heavy internal sparking	Faulty motor	Consult your Clarke dealer
	Worn brushes	Consult your Clarke dealer
Motor becomes hot	Unduly heavy use.	Reduce the force applied to the tool. Let the tool do the work.
	Air vents have become blocked.	Clean out the air vents using compressed air or clean out with a dry cloth.
	Low supply voltage.	Ensure voltage is correct. If an extension cable is used, ensure it is of the correct rating and is fully unwound.
Excessive vibration	Drill bit bent or not fitted correctly.	Check and rectify.
	Machine bearings worn.	Consult your Clarke dealer

ACCESSORIES & CONSUMABLE SPARES

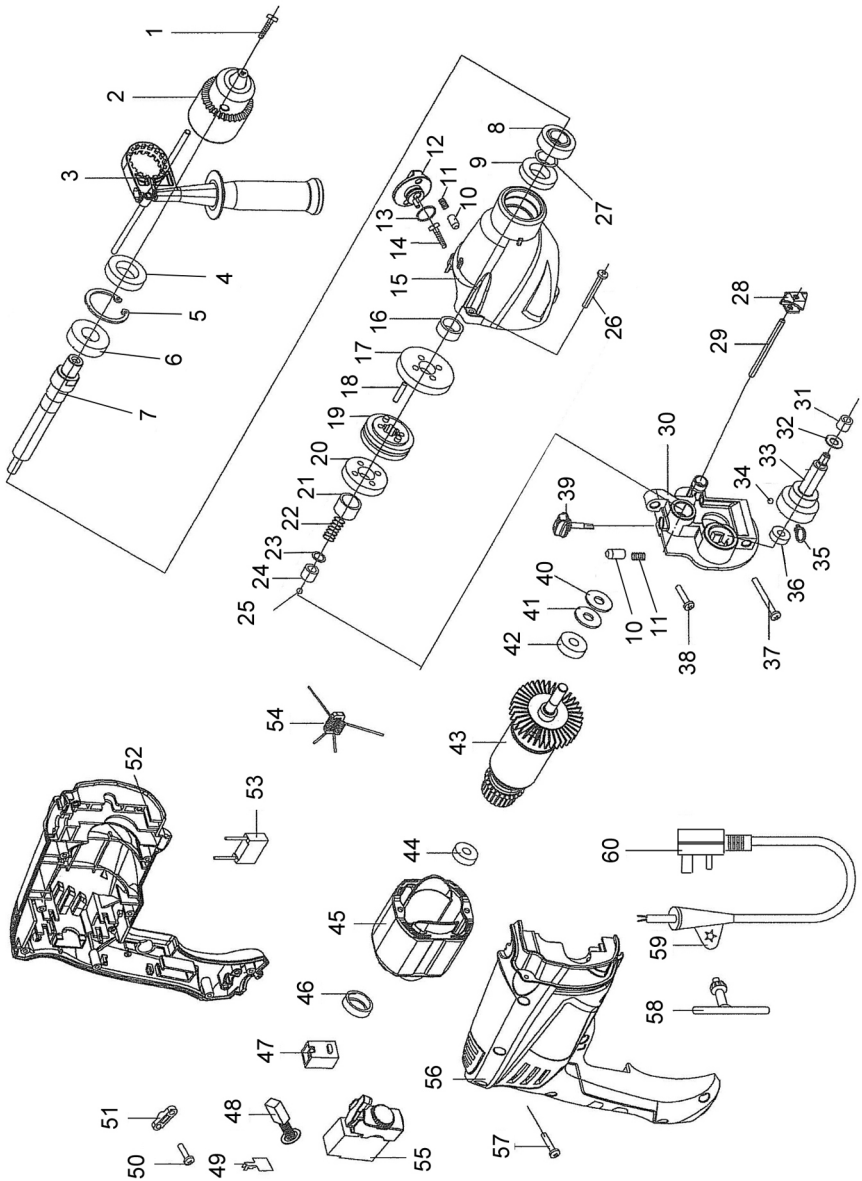
An extensive selection of accessories including Drill Bit Sets, Socket & Bit Sets and Drill Bit Sharpeners are available from your CLARKE dealer. Refer to your Clarke dealer or service department if internal maintenance is required.

SPECIFICATIONS

ITEM	SPECIFICATION
Operating Modes	Drill/Drill & Hammer
Chuck Capacity	1.5 - 13 mm
Rated No-Load Speeds (Low gear/High gear)	0-1000/0-2800 rpm
Weight	3.2 kg
Dimensions (L x W x H)	370 x 88 x 235mm
Operating Voltage & Frequency	230V -50Hz
Fuse Rating	13A
Motor Power	1200 W
Vibration (front/rear handle)	8.151 / 16.686 m ²
Sound pressure level	95.7 dB LWA
Guaranteed Sound Power	106.7 dB LWA

Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice.

PARTS DIAGRAM



PARTS LIST

No	Description
1	Chuck Retaining Screw
2	Chuck
3	Side Handle
4	Oil Seal
5	Circlip
6	Bearing 6002
7	Chuck Spindle
8	Upper Impact Block
9	Lower Impact Block
10	Bullet Head
11	Impact Spring
12	Gear Selector
13	O-Ring
14	Self-tapping Screw
15	Front Housing
16	Front Steel Sleeve
17	Large Gear
18	Pin
19	Gear Change Block
20	Small Gear
21	Rear Steel Sleeve
22	Spring
23	Washer
24	Needle Bearing HK0709
25	Steel Ball
26	Self-tapping Screw
27	Circlip
28	Gear Change Piece
29	Pin
30	Impact Housing

No	Description
31	Needle Bearing HK0608
32	Washer
33	Spindle Gear
34	Steel Ball
35	Circlip
36	Bearing696Z
37	Screw
38	Screw
39	Impact Selector
40	Oil Seal
41	Felt Pad
42	Bearing 608
43	Motor Armature
44	Bearing 607
45	Motor Stator
46	Bearing Cover
47	Brush Holder
48	Contact Brush
49	Brush Clip
50	Clamp Screw
51	Cable Clamp
52	Casing (left-hand)
53	Capacitor
54	Inductor
55	Trigger Assembly
56	Casing (right-hand)
57	Screw
58	Chuck Key
59	Power Cable
60	Power Plug

VIBRATION EMISSIONS

HAND-ARM VIBRATION

Employers are advised to refer to the HSE publication "Guide for Employers".

All hand held power tools vibrate to some extent, and this vibration is transmitted to the operator via the handle, or hand used to steady the tool. Vibration from about 2 to 1500 Hertz is potentially damaging and is most hazardous in the range from about 5 to 20 Hertz.

Operators who are regularly exposed to vibration may suffer from Hand Arm Vibration Syndrome (HAVS), which includes 'dead hand', 'dead finger', and 'white finger'. These are painful conditions and are widespread in industries where vibrating tools are used.

The health risk depends upon the vibration level and the length of time of exposure to it.....in effect, a daily vibration dose.

Tools are tested using specialised equipment, to approximate the vibration level generated under normal, acceptable operating conditions for the tool in question. For example, a grinder used at 45° on mild steel plate, or a sander on softwood in a horizontal plane etc.

These tests produce a value 'a', expressed in metres per second per second, which represents the average vibration level of all tests taken, in three axes where necessary, and a second figure 'K', which represents the uncertainty factor, i.e. a value in excess of 'a', to which the tool could vibrate under normal conditions. These values appear in the specification panel below.

MODEL NO: CON1200

DESCRIPTION: 1200W HAMMER DRILL

Declared vibration emission value in accordance with EN12096

Measured vibration emission value - a : 16.7m/s²

Values determined according to EN28622-1

You will note that a third value is given in the specification - the highest measured reading in a single plane. This is the maximum level of vibration measured during testing in one of the axes, and this should also be taken into account when making a risk assessment.

'a' values in excess of 2.5 m/s² are considered hazardous when used for

prolonged periods. A tool with a vibration value of 2.8 m/s² may be used for up to 8 hours (cumulative) per day, whereas a tool with a value of 11.2 m/s² may be used for ½ hour per day only.

The graph below shows the vibration value against the maximum time the respective tool may be used, per day.



The uncertainty factor should also be taken into account when assessing a risk. The two figures 'a' and 'K' may be added together and the resultant value used to assess the risk.

It should be noted that if a tool is used under abnormal, or unusual conditions, then the vibration level could possibly increase significantly. Users must always take this into account and make their own risk assessment, using the graph above as a reference.

Some tools with a high vibration value, such as impact wrenches, are generally used for a few seconds at a time, therefore the cumulative time may only be in the order of a few minutes per day. Nevertheless, the cumulative effect, particularly when added to that of other hand held power tools that may be used, must always be taken into account when the total daily dose rate is determined.

DECLARATION OF CONFORMITY



Clarke[®]
INTERNATIONAL

Hemnall Street, 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 directive(s):

2004/108/EC *Electromagnetic Compatibility Directive.*

2006/42/EC *Machinery Directive.*

2011/65/EU *Restriction of Hazardous substances.*

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

EN 60745-1:2009 +A11:2010, EN 60745-2-1:2010, EN 55014-1:2006 +A1:2009 +A2:2011,

EN 55014-2:1997 +A2:2008, EN 61000-3-2:2006 +A2:2009, EN 61000-3-3:2013.

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: 2010

Product Description: Hammer Drill
Model number(s): CON1200
Serial / batch Number: N/A
Date of Issue: 23/01/2015

Signed:

J.A. Clarke
Director

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