Clarke®

PUMP

1" WATER PUMP

MODEL NO: SPE1200SS

PART NO: 7237002

OPERATION & MAINTENANCE INSTRUCTIONS

UK CA | CE

ORIGINAL INSTRUCTIONS

GC0922 - rev 1

INTRODUCTION

Thank you for purchasing this Clarke Water Pump.

The SPE1200SS is a centrifugal, horizontal electric pump with a self-priming capability and venturi system, suitable for pumping water from a depth of up to 8 m.

It are designed to operate with clean water only, at a max temp of 35°C. Operating with contaminated or salt water should be avoided. The pump inlet is higher than the impeller inlet so that it can start operating when only the pump body is filled with water.

Upon receipt, any damage or deficiency should be reported to your CLARKE dealer immediately.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service..

	**WARNING: THIS SYMBOL IS USED THROUGHOUT THE USER GUIDE WHENEVER THERE IS A RISK OF PERSONAL INJURY. ENSURE THAT THESE WARNINGS ARE READ AND UNDERSTOOD AT ALL TIMES.**

Your CLARKE water pump has been designed to give long and trouble free service. If, however, having followed the instructions in this booklet carefully, you encounter problems, take the unit to your local Clarke dealer.

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

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required 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.

GENERAL SAFETY PRECAUTIONS

Before using this product it is in your own interest to read and pay attention to the following safety rules.

WARNING: ALWAYS CONNECT THE PUMP TO AN EARTHED POWER SUPPLY VIA AN RCD.

1. **NEVER** use for pumping flammable liquids or corrosive chemicals. This pump is designed to pump clean water only.
2. **ALWAYS** keep the working area clean and well lit. Floors should always be kept clear. Cluttered or dark areas invite accidents.
3. **NEVER** over-reach. Keep your proper footing and balance at all times when installing or maintaining the pump.
4. **NEVER** direct any water discharge towards electrical wiring or equipment.
5. **ALWAYS** thoroughly familiarise yourself with this pump & its operation, and follow all instructions in this manual. Never allow persons unfamiliar with these instructions to instal or operate the pump.
6. **ALWAYS** ensure that the pump is properly installed to prevent it from moving during operation, and that the immediate area surrounding the pump is kept clear.
7. **ALWAYS** maintain the pump with care and keep it clean for best / safest performance.
8. **NEVER** use this product if any part is damaged. Have it inspected and repaired by your local Clarke dealer. Always turn the pump off before carrying out any maintenance.
9. **NEVER** modify this pump in any way. Use it ONLY for the purpose for which it is designed.
10. **ALWAYS** have the pump serviced by your local Clarke dealer, using only identical replacement parts. This will ensure the safety of the pump is maintained. The use of non standard parts could be hazardous.
11. **NEVER** allow the pump to run dry.

CAUTION: THIS PUMP IS NOT A SUBMERSIBLE PUMP. ON NO ACCOUNT SHOULD IT EVER BE IMMERSED IN WATER.

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.

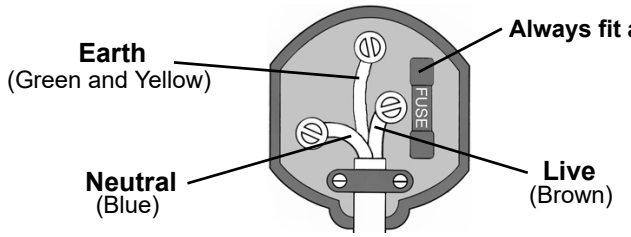
This product may be fitted with a non-rewireable plug. If it is necessary to change the fuse in the plug, the fuse cover must be refitted. If the fuse cover becomes lost or damaged, the plug must not be used until a suitable replacement is obtained.

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.

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**.
- The wire which is coloured **Yellow and Green** must be connected to the terminal which is marked **E** or ⏚ or coloured **Green**.

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). If in any doubt, consult a qualified electrician. DO NOT attempt any repairs yourself. If in any doubt, consult a qualified electrician. DO NOT attempt any electrical repairs yourself.

PREPARATION FOR USE

Because of the variety of possible installations, no plumbing accessories are supplied with your pump. However, accessories designed specifically for this range of pumps are available from your dealer. Contact your CLARKE dealer for further information.

IMPORTANT: The pump MUST NOT be connected to the mains power supply until all hose/pipe installation is completed.

POSITIONING THE PUMP

A typical installation of the pump is shown in Fig 1. Connect the suction and discharge hoses to the pump housing to achieve an air-tight seal. Ensure there is no damage to the hoses which must be well protected and supported.

The pump must always be installed and operated in a horizontal position i.e. with the outlet port facing vertically upwards. The fixing holes in the base should be used to secure the pump firmly in its operating position. Always ensure there is adequate air circulation around the motor.

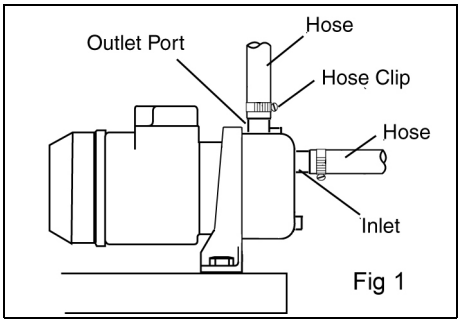


Fig 1

Avoid situations where the pump could become drenched with water. Neither the motor or terminal box are designed to be waterproof.

Position the pump as near to the water source as possible.

Ensure there is adequate drainage and there is no risk of damage to property as a result of water being discharged.

A foot valve/filter should be fitted to the lower end of the suction hose, as illustrated in Fig 2, in order to retain water in the suction system and more importantly, to prevent the possibility of large objects entering the pump body.

The performance of your pump will be affected by the diameter of the inletpipe - any restriction will greatly reduce the flow. We strongly recommend that you use a pipe diameter as large as practical.

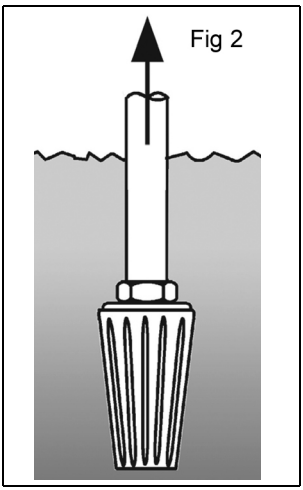


Fig 2

A gate valve may be installed in-line on the delivery side (outlet port) of the pump which can be adjusted as required to regulate the flow of water, and can assist in priming the pump.

CAUTION: DO NOT PLACE ANY SUCH OBSTRUCTION ON THE SUCTION (INLET) SIDE OF THE PUMP UNLESS IT IS AN ISOLATOR VALVE IN A GRAVITY FED SYSTEM. THESE PUMPS SHOULD NOT BE OPERATED WITH THE DELIVERY VALVE COMPLETELY CLOSED.

To prevent unnecessary strain or possible distortion to the pump, ensure that adequate support is provided to the hoses and or pipes. They will be considerably heavier when filled with water.

Should contaminants come into contact with the pump, flush through with cold water as soon as possible to prevent damage to the pump.

Protect the pump and pipework from freezing. The formation of ice may cause serious damage.

Where the pump is to be a permanent fixture, the connections to the pump MUST be flexible, i.e. a short piece of hose should be inserted between the rigid pipework and the pump.

IMPORTANT: An air leak in the suction line will inhibit priming and reduce the capacity of the pump.

Pay particular attention to the following:

- Keep all hoses as short and straight as possible and avoid sharp bends.
- Ensure there is adequate drainage for the discharged water.
- If a flexible hose must be laid across a roadway, protect it with planking.

(Instantaneous shut off pressure, applied when a vehicle runs across an unprotected hose, could cause "hydraulic shock", which can damage the pump and/or the hose).

CONNECTING A FOOT VALVE/FILTER

1. Attach a foot valve/filter to the end of the suction hose to prevent stones etc, from being drawn up, which could cause damage to the pump. Keep the strainer clean. If it is likely to clog with dirt or debris, proceed by either:
   - Preparing a bed of stones on which to rest the strainer.
   - Tying the strainer so that it stays clear of the bottom of the pit, pond or excavation.
   - Tie the strainer inside a basket or bucket.

PRIMING THE PUMP

Remove the filler plug on top of the pump case and prime the pump by filling completely with water, leaving no air gap.

Remember the pump is self-priming only when filled, after which, it will re-prime itself without refilling. Refilling is necessary only if the pump has been drained, or if all the water has been lost.

Fig 3

OPERATION

1. Open any valves in the pipeline.
2. Connect the power supply and switch the pump ON.
3. Wait for the pump to prime.
4. If the motor fails to start or the pump does not deliver water refer to TROUBLESHOOTING.

NOTE: Filling the suction pipe with water will speed up the priming process, and it is recommended that a non-return valve be fitted to the end of the suction pipe.

In the event of blockages, where debris has entered the suction chamber, the chamber can be taken off and cleaned out as described under Maintenance.

5. Periodically, check the level of the water being removed and never allow the pump to run dry.
6. Stop the pump by switching the pump the OFF (O) position.

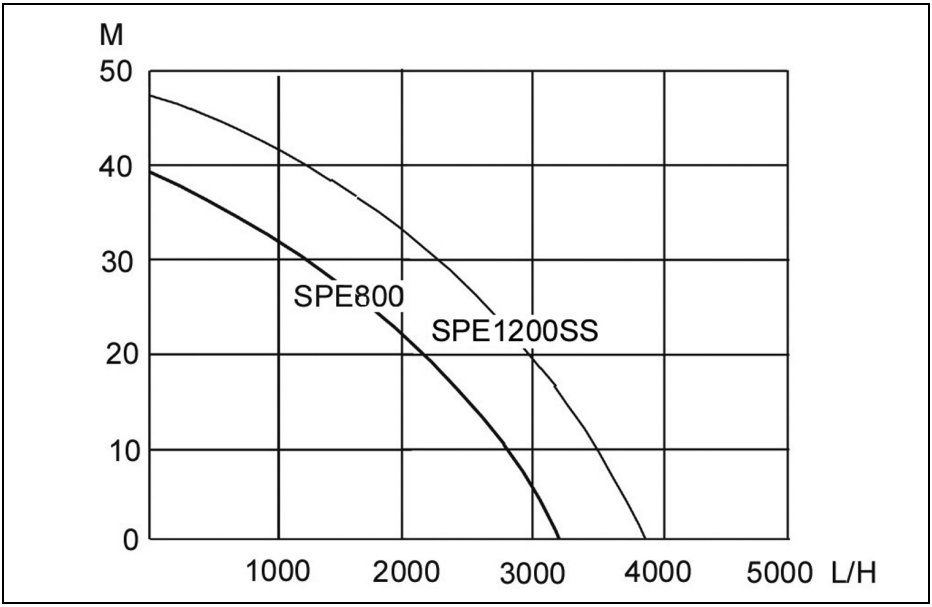
ADDITIONAL CONSIDERATIONS

- Strain caused by vibration can be reduced by connecting a short flexible hose between any rigid pipework and the pump.
- Any restriction in the pipeline will greatly reduce the flow.
- Ensure that the hoses and pipes are supported along their entire length. They will be considerably heavier when filled with water.
- We recommend that you install isolation valves either side of the pump in order to isolate the pump during maintenance/removal.

- A gate valve may be installed in-line on the delivery side of the pump which can be adjusted as required to regulate the flow of water and can assist in priming the pump.

7. If there is a chance of freezing, protect the pump and pipework with suitable lagging. The formation of ice may cause serious damage.

SPE PUMP PERFORMANCE



AFTER USE

After use, and if the pump will not be used over the winter period, or if there is danger of freezing, always drain the pump body.

If the pump has been used with contaminated or salty water, it should be thoroughly flushed with clean water following use, both inside and out. It should then be drained and covered over, if not already sheltered from the weather.

If the pump is seized following a period of inactivity, it may be possible to free it off. Ensure the pump power supply is turned off before by inserting a screwdriver into either the infeed or discharge port and dislodging a jammed impeller. If this is not successful it may be necessary to remove the relevant mounting bolts to separate the pump body and clean away any incrustation.

Re-prime the pump when returning to service.

In the event that overhaul of the pump or motor is necessary, contact your Clarke service department.

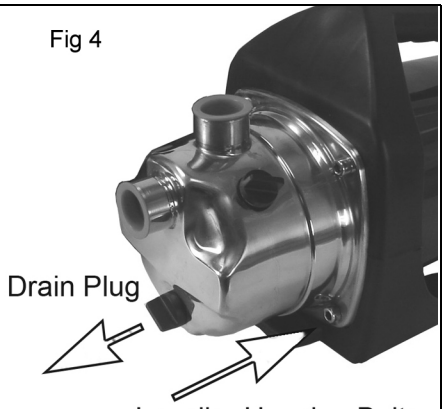
MAINTENANCE

The only maintenance required is a regular inspection to ensure that leaves and other debris is not blocking the passage of water through the pump.

If you suspect the pump is blocked by mud, silt, leaves etc, disconnect it from the mains supply and backflush to clear any blockage though the drain plug.

Always keep the pump in a clean condition, checking regularly for loose bolts or a damaged power cable etc.

Fig 4



If the pump has been used under arduous conditions leading to internal fouling or damage, the impeller housing can be removed by undoing the four socket-headed impeller housing bolts shown in Fig 4.

The impeller can then be inspected for damage.

- Note that the pump also includes a 13mm hexagonal connector used to extend the bolts between pump & motor housing.

STORAGE

After use, drain the pump body whenever there is danger of freezing. If the pump has been used with contaminated or salty water, it should be thoroughly flushed with clean water following use, both inside and out. It should then be drained before replacing the drain plug and storing in a clean dry environment not exposed to the weather.

In the event that dismantling and overhaul of the pump is necessary, contact your CLARKE International Service Department on 020-8988-7400.

ACCESSORIES

A wide range of accessories is available, including Filters, Foot Valves, Hoses, Couplings and 90° Hose Adaptors, etc. Contact your Clarke dealer for further information or Clarke International Sales Department on 01992 565333.

These pumps are supplied with a 1" male 90° hose adaptor.

The use of parts other than genuine Clarke replacement parts may result in possible safety hazards or decreased machine performance, and will invalidate your warranty.

TROUBLESHOOTING

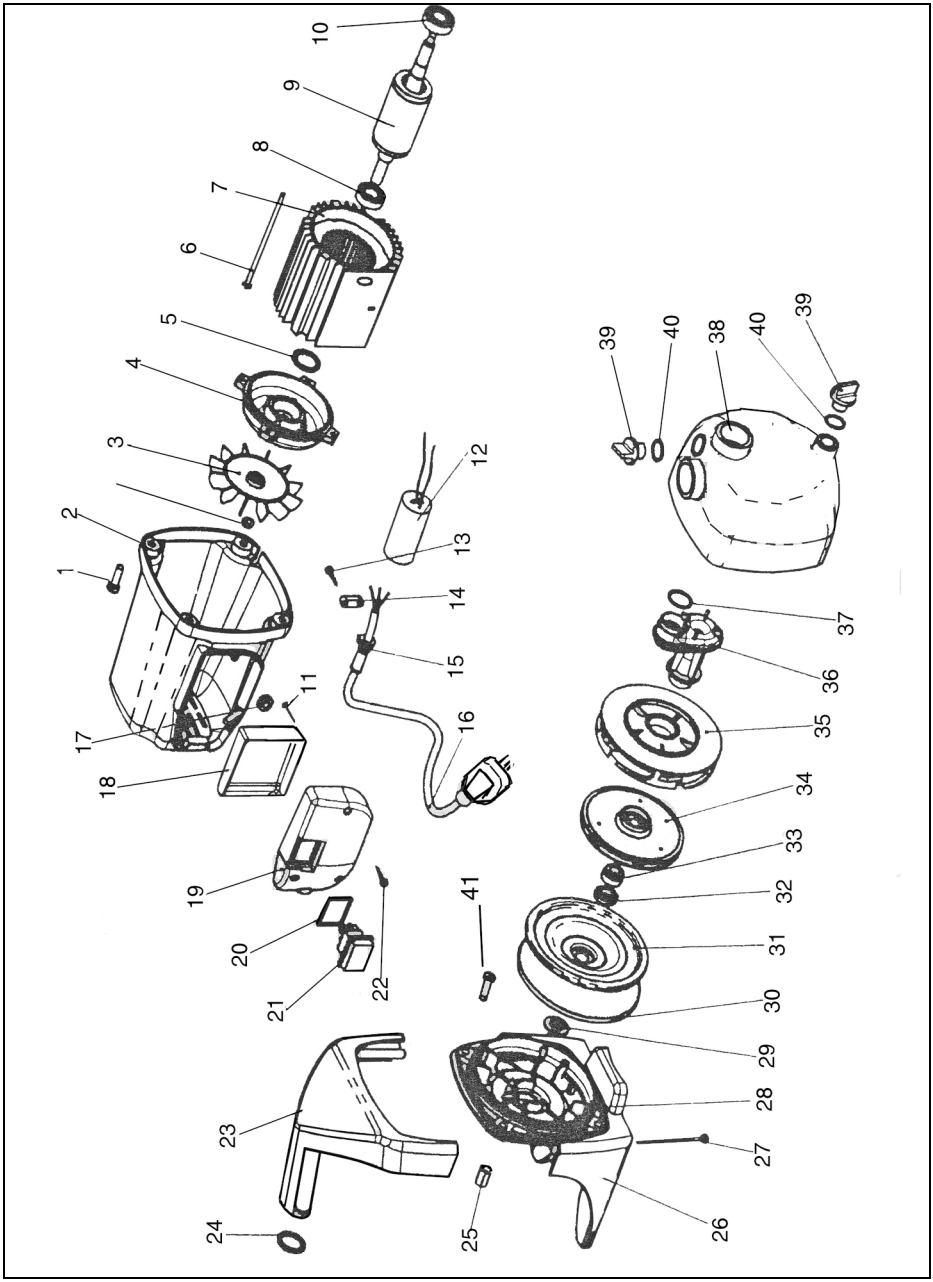
Problem	Cause	Solution
Pump does not run.	Thermal protection has been activated.	If the motor has overheated, wait for it to cool before trying again
	Faulty power connection	Insert plug securely.
	No power supply	Check power supply and circuit breaker
	Impeller seized/blocked	Disconnect pump from power supply. Investigate cause and clear blockage
Pump fails to prime	Air leaks through suction hose joints (damaged hose, broken clamp, damaged.	Repair connections/ replace hose as necessary.
	Blocked inlet hose	Check pipeline for blockage. Check any inlet valve fitted is fully open.
Pump runs but gives poor output	Congested material inside pump	Clean out & backflush pump.
	Suction or delivery line obstructed.	Remove obstruction and ensure there are no kinks in delivery line.
	Inlet pipe leakage.	Check inlet pipe and connector for leaks. Tighten as required.
	Air leaks through damaged seal.	Renew seal.
	Impeller damaged and making poor seal.	Return to your Clarke dealer for repair
	Impeller / mechanical seal is badly worn.	Return to your Clarke dealer for repair.
	High friction losses in the suction line.	Avoid unnecessary curves restrictions or valves
	Pump badly sited resulting in suction lift too high	Set pump as close as possible to the level of the water to be pumped

Sudden loss of flow.	Blockage of inlet pipe	Check pipeline for blockage.
Undue vibration or noise.	Excessive flow of water.	Decrease flow of water. by adjusting inlet/outlet valves in system.
	Resistance in inlet pipe caused by obstruction.	Check pipe and clean out as necessary
	Loose rotating component	Return to your dealer for repairs.
	Installation of pump is unstable.	Stop pump and re-position.
	Air pocket in pump or pipeline.	Release plug in impeller housing to release air.
	Damaged impeller	Return to your Clarke dealer for repair.

SPECIFICATION

Model	**SPE1200**
Water Classification	Clean
Maximum Delivery	61 l/min
Rated Head	46 m
Maximum Suction Lift	8 m
Operating Temperature	0-35oC
Ingress Protection Rating	IP x4 (splashing water)
Supply	230V / 50Hz
Rated Input Current	1200 W
Inlet/Outlet Thread Size	1" BSP
Weight	8.2 kg
Length x Width x Height	348 x 218 x 243 mm
Sound Pressure Level	73.0 dB LpA
Sound Power Level	84.0 dB LwA
Guaranteed Sound Power	86.0 dB LwA

SPE1200 COMPONENT PARTS



SPE1200 COMPONENT PARTS

ID	DESCRIPTION	ID	DESCRIPTION	ID	DESCRIPTION
1	Allen bolt 12mm	15	Cable gland	29	Mechanical seal
2	Motor cover	16	Power cable & plug	30	O-ring 140 dia
3	Cooling fan	17	Rubber grommit	31	Impeller
4	Motor end casting	18	Transparent cover	32	Fixing ring
5	Spring washer	19	Cover panel	33	End fixing
6	Tie bolt 150mm	20	Switch seal	34	Diffuser plate
7	Motor stator	21	Rocker switch	35	Diffuser
8	Motor bearing	22	Self tapping screw	36	Discharge elbow
9	Rotor assembly	23	Handle moulding	37	O-ring 30 dia
10	Bearing	24	Handle end cap	38	Stainless housing
11	S/tscrew 15mm	25	Hex connector	39	Threaded plug 12mm
12	Capacitor	26	Base moulding	40	O-ring 16 dia
13	S/t screw 19mm	27	Connecting screw	41	
14	Cable clamp	28	Frame casting		

IMPORTANT: The use of parts other than genuine CLARKE replacement parts may result in safety hazards, decreased performance, and will invalidate your warranty.

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.

If disposing of this product or any damaged components, do not dispose of with general waste. This product contains valuable raw materials. Metal products should be taken to your local civic amenity site for recycling of metal products.

UK CA

Clarke® INTERNATIONAL

Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

Product Description:	1200W Garden Pump with Stainless Steel Housing
Model number(s):	SPE1200SS
Serial / batch Number:	7237002
Date of Issue:	25/08/2022
(Noise Conformity)	
Notified Body:	TUV Rheinland LGA Products GmbH
	90431 Nurnberg
	Tillystrasse
	Germany
Technical Documentation Holder:	A.R. Pond
	Clarke International
	2a Shrubland Road
	London E10,7RB
	UK
Conformity Assessment Procedure:	to 2000/14/EC Annex VI
Manufacturer:	Clarke International
Noise Related Value:	1.2kW
Measured Sound Power Level:	84dB
Guaranteed Sound Power Level:	86dB

UK CA

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 statuary requirement(s):

Electromagnetic Compatibility Regulations 2016

Electrical Equipment (Safety) Regulations 2016

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

Noise Emissions in the Environment by Equipment for use Outdoors Regulations 2001

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

EN 55014-1:2017 + A11, EN 55014-2:2015, EN 61000-3-3:2013 + A1, EN IEC 61000-3-2:2019, EN 60335-1:2012 + A11 + A13 + A1 + A14 + A2, EN 60335-2-41:2003 + A1 + A2, EN 62233:2008, EN ISO 12100:2010, EK 527-12 Rev.2, IEC 62321-1:2013, IEC 62321-2:2013, IEC 62321-3-1:2013, IEC 62321-4:2013 + AMD1:2017 CSV, IEC 62321-5:2013, IEC 62321-6:2013, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017, ISO 17075:2017.

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

Signed:

J.A. Clarke

Director

CE

Clarke®
INTERNATIONAL
Fitzwilliam Hall, Fitzwilliam Place, Dublin 2

DECLARATION OF CONFORMITY

This is an important document and should be retained.

Product Description:	1200W Garden Pump with Stainless Steel Housing
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Serial / batch Number:	7237002
Date of Issue:	25/08/2022
(Noise Conformity)	
Notified Body:	TUV Rheinland LGA Products GmbH 90431 Nurnberg Tillystrasse Germany
Technical Documentation Holder:	A.R. Pond Clarke International 2a Shrubland Road London E10,7RB UK
Conformity Assessment Procedure:	to 2000/14/EC Annex VI
Manufacturer:	Clarke International
Noise Related Value:	1.2kW
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Guaranteed Sound Power Level:	86dB

CE

Clarke®
INTERNATIONAL
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):

2004/108/EC	*Electromagnetic Compatibility Directive.*
2006/95EC	*Low Voltage Equipment Directive.*
2002/95/EC	*Restriction of Hazardous substances.*
2000/14/EC	*Noise Emissions Directive (amended by 2005/88/EC).*

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

EN 55014-1:2017 + A11, EN 55014-2:2015, EN 61000-3-3:2013 + A1, EN IEC 61000-3-2:2019, EN 60335-1:2012 + A11 + A13 + A1 + A14 + A2, EN 60335-2-41:2003 + A1 + A2, EN 62233:2008, EN ISO 12100:2010, EK 527-12 Rev.2, IEC 62321-1:2013, IEC 62321-2:2013, IEC 62321-3-1:2013, IEC 62321-4:2013 + AMD1:2017 CSV, IEC 62321-5:2013, IEC 62321-6:2013, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-8:2017, ISO 17075:2017.

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: 2009

Signed:

J.A. Clarke
Director

A SELECTION FROM THE VAST RANGE OF

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Servicing & Technical Enquiries
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