

Clarke®



250W PUDDLE PUMP WITH AUTO SENSOR
MODEL NO: PSP105

PART NO: 7230693

OPERATION & MAINTENANCE INSTRUCTIONS



LS0216

INTRODUCTION

Thank you for purchasing this CLARKE 250W Puddle pump with Auto Sensor.

This pump is designed for pumping clean water only. **It is NOT designed for pumping slurry, sludge, mud or heavily polluted water, or any water containing chemicals or other acidic contaminants including salt water.**

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.

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.

OVERLOAD SWITCH

These pumps are fitted with a thermal overload switch. If the pump overheats for any reason, it will automatically switch the pump OFF. Once the pump has cooled (at least 5-10 minutes), the pump will automatically restart.

SAFETY INSTRUCTIONS

GENERAL

1. Read all instructions before use and save these instructions for future use.
2. An approved residual current device (RCD) which has a tripping current of less than 30mA **MUST** be used for all operations.
3. The electrical supply must be the same as that on the rating plate.
4. Always make sure that your hands are dry when connecting or disconnecting from the mains supply.
5. Never pull the mains lead to disconnect the pump from the mains socket.
6. The mains plug must be kept away from the water at all times.
7. Do not allow children or unauthorised people to touch the pump, cables or connections.
8. Disconnect the pump from the mains supply when not in use.
9. If necessary have the pump repaired by a qualified person.
10. Keep the mains lead away from heat, oil and sharp edges.
11. If you have to use an extension lead with this product, it must be designed for outdoor use and incorporate a cable suitable for use with Class I appliances.
12. Disconnect the pump from the electrical supply and wear gloves during servicing or maintenance.

PUMP SPECIFIC

1. Do not pump explosive / flammable liquids or chemicals.
2. Never allow the pump to run dry or operate out of the water (manual mode only).
3. Submersible pumps should always be submerged and stored vertically.
4. Disconnect the pump from the mains supply before placing it into or removing it from the water.
5. Always check the plug, and all cables for damage before use.
6. Do not use the pump if damaged. Refer to qualified service personnel for repair.
7. Never carry or lower the pump by the power cable or sensor cable always use the handle or a rope tied securely to the handle.
8. Never insert your fingers into the pump whilst it is connected to the mains.
9. Never use the submersible pump in a swimming pool when there are people or animals in the pool.
10. Keep the pump clear of any sediment by standing it on a platform or brick or suspending it at a suitable depth.
11. Do not use the pump if the water is liable to freeze, as this can cause damage to the pump. Remove the pump from the water and store it in a frost free location.

ELECTRICAL CONNECTIONS



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

Connect the mains lead to a standard, 230 Volt (50Hz) electrical supply through an approved 13 amp BS 1363 plug, or a suitably fused isolator switch.

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



WARNING: THE WIRES IN THE POWER CABLE OF THIS PRODUCT ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:
BLUE = NEUTRAL BROWN = LIVE YELLOW AND GREEN = EARTH

If the colours of the wires in the power cable do not agree with the markings on the plug.

- The BLUE wire must be connected to the terminal which is marked N or coloured black.
- The BROWN wire must be connected to the terminal which is marked L or coloured red.
- The YELLOW AND GREEN wire must be connected to the terminal which is marked E or $\frac{1}{4}$ or coloured green.

Plug must be BS1363/A approved.

Earth (Green and Yellow)

Neutral (Blue)

Live (Brown)

Always fit a 5 Amp fuse.

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

AN APPROVED RESIDUAL CURRENT DEVICE (RCD) WHICH HAS A TRIPPING CURRENT OF LESS THAN 30 mA MUST BE USED.

If you are not sure, consult a qualified electrician. DO NOT try to do any repairs.

ASSEMBLY

Remove all packaging and make sure that the unit has no visible damage. Dispose of all packaging appropriately.

FITTING THE ELBOW

1. Screw the elbow into the outlet port as shown.
2. Connect a suitable hose (not supplied) to the pump outlet.
 - Suitable hoses are available from your local Clarke dealer.



FITTING THE HOSE ADAPTER

The 3 step hose adaptor can be screwed onto the elbow if required.

1. Fit the supplied non return valve between the adaptor and the elbow.
2. Trim the adaptor to the required size.
3. Connect your hose (not supplied)



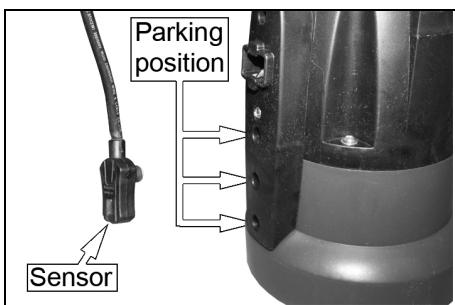
NOTE: Reducing the hose diameter will effect the maximum flow rate.

SETTING UP THE PUMP

AUTOMATIC OPERATION

This pump has an Automatic Sensor function. This activates the pump when the water level sensor is immersed.

1. The sensor can be 'parked' in one of three positions (High, Medium, Low) on the pump as shown.
2. The pump will run until the water level drops below the sensor.
 - The pump continues to run for a further 3 minutes and then stops.



MANUAL OPERATION

The pump can also be switched on manually by inserting the sensor into the socket on the side of the pump.

NOTE: If the sensor is inserted into the socket, the pump will run continuously.

NOTE: Do not allow the pump to run dry.



POSITIONING THE PUMP

1. Place the pump on a flat surface in the area that you want to drain.
 - If there is sediment in the operating area, the pump should be placed vertically on house bricks, or similar.
 - ALWAYS raise and lower the pump using a rope attached to the lifting handle.
 - Take all necessary precautions as described on page 3.

USING THE PUMP



WARNING: CHECK THE PUMP FOR DAMAGE BEFORE USE, DO NOT USE THE PUMP IF IT IS DAMAGED IN ANY WAY.

1. Connect the mains plug to the mains supply.
 - Always use a high sensitivity residual current device (RCD) which has a tripping current of less than 30mA.
2. Switch the mains power supply on.
 - The pump will begin to drain water.
3. When pumping is finished, disconnect the pump from the mains power supply.

IMPORTANT: During manual operation, do not allow the pump to run dry.

MAINTENANCE



WARNING: BEFORE CHECKING THE CONDITION OF THE PUMP, ENSURE IT IS UNPLUGGED FROM THE MAINS SUPPLY. IF THE UNIT IS HARD WIRED, ENSURE THE CIRCUIT BREAKER IS OPEN.

This pump should require no maintenance other than regular cleaning.

If the pump starts to show signs of wear or damage, contact your CLARKE dealer for advice.

CLEANING

1. Check the pump installation regularly to ensure the water inlet is clear of leaves or other debris.
2. Take extra care to remove any debris from around the impeller.

NOTE: Do not attempt to repair the pump yourself, as you may damage the waterproof seal and invalidate your guarantee. Repairs must be carried out by your CLARKE dealer, or contact the CLARKE Service Department, on 020 8988 7400.

STORAGE

When the pump is not being used for extended periods, clean and dry it thoroughly and store in indoors. If the pump is left in water, it must be run at least once a week to prevent it from seizing up.

SPECIFICATIONS

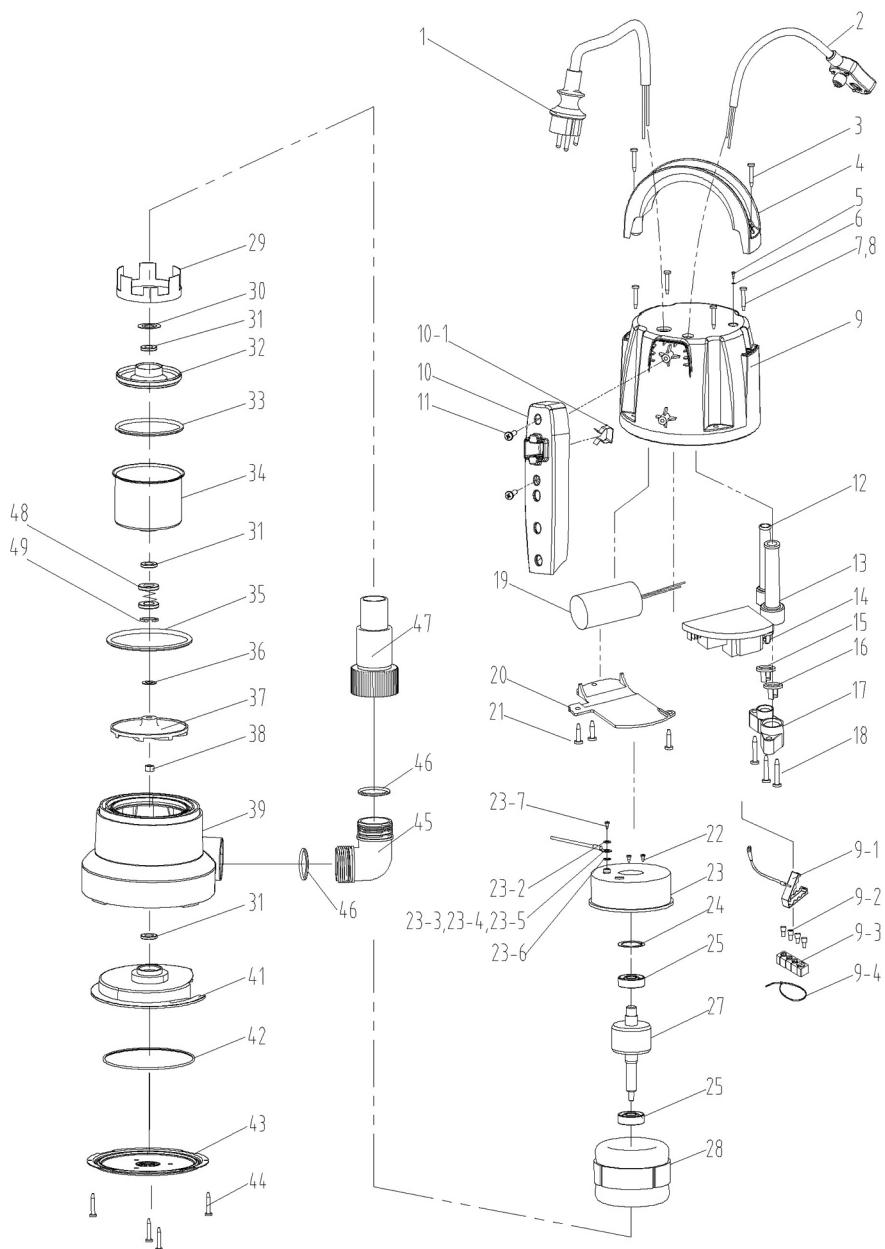
Voltage	230V~50Hz
Outlet Thread Diameter	1½" BSP
Power	250W
Maximum Head Height	6 m
Maximum Depth	5 m
Maximum Flow	100 l/min
Maximum Water Temperature	35°C
Maximum Particle Size	Clean Water Only
Weight	4 kg
Cable Length	10 m
Dimensions (D x W x H)	168 x 173 x 260 mm

TROUBLESHOOTING

PROBLEM	SOLUTION
PUMP WILL NOT START	<ol style="list-style-type: none">1. Make sure that the power is switched on.2. Check fuse (consult an electrician if in doubt).3. If an extension lead is fitted, check connections (consult an electrician if in doubt).4. Internal thermal cut-out has not re-set. Leave for 5-10 minutes and try again.5. The impeller may be jammed. Disconnect from the mains supply and remove any objects that may be obstructing the impeller.6. Water level too low. - Try using the pump in manual operation mode.7. If the pump still fails to start, consult your CLARKE dealer for advice.
PUMP WILL START BUT NOT PUMP	<ol style="list-style-type: none">1. Check that the inlet is not blocked.2. Check that the outlet is not clogged or obstructed.3. The head may be too great, i.e. you are trying to lift the water too great a distance for the pump to cope with. ("Specifications" on page 7).4. Air bubble in the pump, produced during immersion. immerse the pump again, at an angle, and shake it whilst lowering to remove any air trapped in the system.5. Impeller may be damaged - Consult your CLARKE dealer.
PUMP WILL NOT STOP	<ol style="list-style-type: none">1. Sensor may be faulty. Consult your CLARKE dealer for advice.
PUMP STOPS RUNNING	<ol style="list-style-type: none">1. Thermal overload has operated. Leave for 5-10 minutes and try again.2. Pump has run dry, or auto sensor has cut in.3. A foreign object has jammed the impeller.

If this does not solve your problem, please contact the Clarke service department.

PARTS LIST & DIAGRAM



PARTS LIST

1	Power Cable And Plug	23-3	Yellow-green Wire
2	Water Sensor	23-4	Lug Plate
3	Self Tapping Screw	23-5	Heat Shrinkable Tube
4	Handle	23-6	Gasket
5	Self Tapping Screw	23-7	Bolt
6	O-ring	24	Wave Washer
7	Customized Self Tapping Screw	25	Bearing
8	Gasket	27	Rotor
9	Pump Housing	28	Stator
9-1	Nylon Secure Pressing Cap	29	Bush
9-2	Screw	30	Gasket
9-3	Rubber Clip	31	O-ring
9-4	Ribbon	32	Aluminium Bushing
10	Clip	33	O-ring
10-1	Clip	34	Front Cover
11	Self Tapping Screw	35	O-ring
12	Cable Sheath	36	Adjustable Washer
13	Cable Sheath	37	Impeller
14	Circuit Board	38	Nut
15	Cable Gland	39	Main Pump Housing
16	Cable Gland	41	Fairing
17	Cable Block	42	O-ring
18	Customized Self Tapping Screw	43	Stainless Steel Baseboard
19	4uf Capacitor	44	Self Tapping Screw
20	Lock Block	45	Elbow
21	Self Tapping Screw	46	O-ring
22	Bolt	47	Outlet Connector
23	Rear Cover	48	Mechanical Seal
23-2	Gasket	49	Protective Ring

Part number = (DHPSP105 + the number of the part)

DECLARATION OF CONFORMITY

CE

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.
- 2006/95/EC Low Voltage Equipment Directive.
- 2011/65/EU Restriction of Hazardous substances.

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

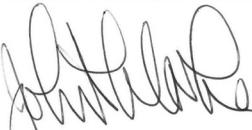
- EN 60335-1:2012, EN 60335-2-41:2003 +A1:2004 +A2:2010, EN 62233:2008, EN 61000-3-3:2008,
- EN 55014-2:1997 +A1:2001 +A2:2008, EN 61000-3-2:2006 +A1:2009 +A2:2009,
- EN 55014-1:2006 +A1:2009.

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: Submersible/ Puddle pump(s)
Model number(s): HIPPO5A, CSV4A, PSP105, PSP125B, PSV6A, PSV7A, PSV5A
Serial / batch Number: N/A
Date of Issue: 24/03/2015

Signed:



J.A. Clarke

Director

A SELECTION FROM THE VAST RANGE OF

Clarke®

QUALITY PRODUCTS

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

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

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STARTERS/CHARGERS

All sizes for car and commercial use.



PARTS & SERVICE: 0208 988 7400

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

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