

Marina Cam 100/25 HL

Marina Cam 100/25 HL Automatic Pressurization Unit Instruction Manual

Model: Cam 100/25 HL | Reference: 101521540

1. INTRODUCTION

The Marina Cam 100/25 HL is an automatic pressurization unit designed to enhance water pressure in distribution networks, supply water from wells, and support domestic water installations. This unit features a self-priming jet pump, ensuring reliable and quiet operation. It is suitable for continuous domestic use, handling liquid temperatures up to a maximum of 35°C.

Key features include:

- Automatic pressurization with self-priming electric jet pump.
- Maximum flow rate of 60 liters per minute.
- Operating pressure range of 1.6 to 3.2 bars.
- Maximum manometric suction height of 8 meters.
- Continuous service capability.

2. SAFETY INFORMATION

Read all safety warnings and instructions carefully before installation and operation to prevent electric shock, fire, or serious injury.

- **Electrical Safety:** Ensure the power supply matches the unit's specifications (230 Volts, 50 Hz). Always connect the unit to a properly grounded outlet. Do not operate with damaged cables or plugs. Disconnect power before any maintenance or service.
- **Water Temperature:** The unit is designed for liquids with a maximum temperature of 35°C. Operating with hotter liquids can damage the pump and void the warranty.
- **Installation Environment:** Install the unit in a dry, well-ventilated area, protected from frost and direct sunlight. Ensure stable placement to prevent tipping.
- **Children and Pets:** Keep children and pets away from the operating unit.
- **Maintenance:** Only qualified personnel should perform repairs or complex maintenance.

3. PRODUCT OVERVIEW

The Marina Cam 100/25 HL unit consists of a self-priming pump mounted on a pressure tank, equipped with a pressure switch and a pressure gauge for automatic operation.



Figure 3.1: Overall view of the Marina Cam 100/25 HL automatic pressurization unit. The unit features a green pump body and a horizontal pressure tank, with a visible pressure gauge and electrical connections.



Figure 3.2: Close-up view of the pressure gauge and flexible connection hose on the unit. The gauge displays the current system pressure.



Figure 3.3: Detailed view of the pressure switch, which automatically controls the pump's operation based on system pressure.

4. SPECIFICATIONS

Specification	Value
Brand	Marina
Model Reference	101521540
Manufacturer	Speroni
Product Dimensions (L x W x H)	53 x 27 x 49.7 cm
Weight	22.6 Kilograms
Color	Green Marine
Material	Pump body: Cast iron, metal; Impeller: Stainless steel
Power Source	Electric cable
Voltage	230 Volts
Absorbed Power	1100 Watts
Maximum Flow Rate	60 Liters per minute
Operating Pressure Range	1.6 – 3.2 bars
Maximum Suction Height	8 Meters
Maximum Liquid Temperature	35°C
Continuous Service	Yes

5. SETUP

Proper installation is crucial for the safe and efficient operation of your pressurization unit. If you are unsure about any step, consult a qualified professional.

1. **Placement:** Select a stable, level, and dry location for the unit, protected from direct weather exposure, frost, and excessive heat. Ensure adequate ventilation around the motor.
2. **Suction Line Connection:** Connect a rigid, airtight suction hose to the pump's inlet. Ensure the suction line is as short and straight as possible, with a foot valve (check valve) and strainer at the end submerged in the water source. The maximum suction height is 8 meters.
3. **Discharge Line Connection:** Connect the discharge pipe from the pump's outlet to your distribution system. Use appropriate fittings and sealants to prevent leaks.
4. **Priming the Pump:** Before first use, or if the pump has run dry, the pump body must be filled with water through the priming port until it overflows. Replace the priming plug securely. This step is essential for self-priming pumps to function correctly.
5. **Electrical Connection:** Connect the unit's power cable to a grounded electrical outlet (230V, 50Hz) protected by a residual current device (RCD). Ensure the electrical supply meets the unit's requirements.

6. OPERATION

Once installed and primed, the Marina Cam 100/25 HL unit operates automatically.

1. **Initial Start-up:** After priming and connecting to power, the pump will start automatically when water is drawn from the system (e.g., by opening a tap).
2. **Automatic Function:** The integrated pressure switch monitors the system pressure. When pressure drops below a set minimum (e.g., when water is consumed), the pump activates. When water consumption stops and pressure reaches the set maximum, the pump deactivates.
3. **Monitoring:** Periodically check the pressure gauge to ensure the system is operating within the expected pressure range (1.6 to 3.2 bars).
4. **Shutting Down:** To temporarily stop the unit, simply close all water outlets. For extended periods of non-use, disconnect the unit from the power supply.

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your pressurization unit.

- **Regular Checks:** Inspect the unit periodically for any signs of leaks, corrosion, or damage to cables and connections.
- **Clean Strainer:** If a strainer is installed on the suction line, clean it regularly to prevent blockages and maintain efficient water flow.
- **Winterization:** In areas prone to freezing temperatures, drain the pump and pipes completely to prevent damage from ice expansion. Store the unit in a frost-free environment if possible.
- **Pressure Tank Air Pressure:** The pressure tank contains an air bladder. Periodically check and adjust the air pressure in the tank (when the pump is depressurized and empty) according to manufacturer recommendations to ensure efficient operation and prevent excessive pump cycling.

8. TROUBLESHOOTING

This section addresses common issues you might encounter with your pressurization unit.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Pump does not start	No power supply; Thermal overload; Faulty switch	Check power connection and circuit breaker; Allow motor to cool; Consult a technician.
Pump runs but no water is delivered	Pump not primed; Suction line leak; Foot valve stuck; Water source empty	Re-prime the pump; Check all suction line connections for air leaks; Inspect foot valve; Verify water level in source.
Low pressure or intermittent flow	Partial blockage in suction/discharge; Air in system; Low air pressure in tank; Worn pump components	Check and clear blockages; Bleed air from system; Check and adjust tank air pressure; Consult a technician for internal inspection.
Pump cycles on and off frequently	Leak in system; Low air pressure in tank; Faulty pressure switch	Check for leaks in plumbing; Check and adjust tank air pressure; Consult a technician.

9. WARRANTY AND SUPPORT

The Marina Cam 100/25 HL pressurization unit is manufactured to high-quality standards. In case of issues, please refer to the troubleshooting section first.

Spare Parts Availability: Spare parts for this model are available for a period of 7 years from the date of purchase.

For technical assistance, warranty claims, or to order spare parts, please contact your retailer or an authorized service center. Always provide the model name (Cam 100/25 HL) and reference number (101521540) when seeking support.