The Trevoli UPA 15-10 N is a small stainless steel circulator pump, designed for water pressure boosting in domestic properties to provide additional pressure to hot and cold water taps and similar outlet points.

The UPA 15-10 N is mainly for use in open vented systems, but may also be installed directly on the incoming water mains supply to feed a combination boiler, provided approval has been obtained from the local water company.

The pump incorporates a flow switch which starts and stops the pump according to flow when a tap is opened or closed. The pump is supplied with a 1.5 metre power cable with 3 pin plug.

**FEATURES**

- Typically adds between 0.65 bar and 0.9 bar pressure to the inlet pressure at the pump.
- Stainless steel encapsulated rotor
- Stainless steel rotor can and bearing plate
- Stainless steel pump housing
- Pump can be set to Manual, Automatic or Off
- Flow up to 0.4 l/s at 0.65 bar

**ELECTRICAL DATA**

<table>
<thead>
<tr>
<th>Pump Model</th>
<th>Full Load Current (A)</th>
<th>Starting Current (A)</th>
<th>Input Power (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UPA 15-10 N</td>
<td>0.65</td>
<td>1.3A</td>
<td>150</td>
</tr>
</tbody>
</table>

**DIMENSIONS & WEIGHTS**

All dimensions in mm

Net Weight: 2.5kg

**PUMP PERFORMANCE**

<table>
<thead>
<tr>
<th>Q [l/s]</th>
<th>H [m]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>120</td>
</tr>
<tr>
<td>0.2</td>
<td>100</td>
</tr>
<tr>
<td>0.4</td>
<td>80</td>
</tr>
<tr>
<td>0.6</td>
<td>60</td>
</tr>
<tr>
<td>0.8</td>
<td>40</td>
</tr>
<tr>
<td>1.0</td>
<td>20</td>
</tr>
</tbody>
</table>

240V 1ph 50Hz
APPLICATIONS
The UPA 15-10 N is a circulator booster pump with integral flow switch designed for pressure boosting of hot or cold water supplies in domestic properties.
The pump provides additional pressure to taps and similar outlet points, where the required flow rate is up to 0.6 l/s. The UPA 15-10 N is intended to be used mainly in open vented systems. However, subject to approval from the local water company, it may also be connected directly to the water main. The pump incorporates a flow switch which starts and stops the pump when a tap is turned on or off.

OPERATION
The operation of the pump can be selected by means of a three position switch, OFF, MANUAL and AUTO.
In the AUTO position the pump is started and stopped by the integral flow switch. The flow switch is operated by a gravity flow of 2 l/min. The gravity flow at all fittings which require boosting should be checked to ensure that the pump will operate when the outlet fitting is opened.
When the MANUAL position is selected the pump will run continuously. The pump should not be operated for long periods without flow through the pump.
Minimal maintenance of the pump is required. Periodically the flow switch may need cleaning depending on operating conditions.

INSTALLATION
1. The pump should be sited in a dry, well ventilated, but frost-free position where it will not be subject to extremes of temperature.
2. The environment should be non-aggressive and the atmosphere non-explosive
3. Ensure that there is sufficient clearance and lighting around the unit to allow service and maintenance operations to take place safely without obstruction.
4. The pipe work installation of the unit should be strictly in accordance with local water authority regulations.

5. Attention should be given to the possibility of water leakage from the pump during commissioning or service activities, in order to prevent possible damage to the surrounding area.
6. The pump must not be installed in vertical pipe work pumping downwards.
7. The pump must always be installed with the motor shaft in the horizontal position.

PUMPED LIQUIDS
The UPA 15-10 N is suitable for the pumping of clean, thin, non-aggressive liquids not containing solid particles or fibres.
- rain water
- potable water
- fresh water
The pump must not be used for pumping of inflammable liquids such as diesel oil, petrol or similar liquids.

MAXIMUM OPERATING CONDITIONS
Casing pressure: 6.0 bar.
Liquid temperature: 0-70°C.
Ambient temperature: 0°C to +40°C.
Relative Humidity: Maximum 95%.
To avoid cavitation noise and risk of damage to the pump bearings, a pressure of minimum inlet pressure of 1.5 m head (0.15 bar) is required at the pump during operation.

TECHNICAL DATA
Mains voltage: 1 x 220-240 V, 50 Hz.
Voltage tolerances: -10% to +6%.
Enclosure class: IP42.
Winding Insulation: Class B.
Sound pressure level: 55 dB(A).
Marking: CE.
The pump is supplied with a 1.5 metre power cable with 3 pin plug.

TYPICAL INSTALLATION
- Boosting pressure to upper and lower taps.
- Boosting to taps, with gravity flow to lower taps.
- Boosting to a single tap.
- INCORRECT: Pump installed before open vent.
Installation and start-up

Installation

The pump must always be installed with horizontal motor shaft. At start-up, the rotor can must be vented by removing the plug from the top of the motor. Within a short time, the rotor forces the remaining air out into the system via the shaft.

The terminal box of the UPA 15-10 has to be on the outlet of the pump, because of the built-in flow switch. **Note:** As the pumps have drain holes, the terminal box must not face downwards.

Non-Return Valve

For optimal performance it is recommended that a non return valve is installed on the inlet port of the pump.

Start-up

The pump must not be started until the system has been filled with liquid and vented. Furthermore, the required minimum inlet pressure must be available at the pump inlet. The system cannot be vented through the pump. The pump is self-venting and does not require venting before start-up.