Applications
To restore system pressure when the mains supply is insufficient, a pump may be used. However to comply with Water Authority Byelaws, a break tank must be incorporated, as the pump may not be connected directly to the mains water supply. The ESPA Sub-tank system has been designed to solve this problem. A fully automatic unit, the Sub-Tank has a submersible stainless steel pump with a built-in pressure control incorporated into the break tank giving space saving advantages in small plant rooms. Control is provided by a constant pressure device integrated in the submersible pump. Electronics prevent starting without water. Installation is straightforward, with only three connections plus power cable required.

Equipment
ST07.3/100.05 complete with pressure stat 05. Adjustable start pressure between 1.5 - 2.5 Bar.

Dimensions
ST07.3/100.05. 500 mm x 240 mm x 990 mm height. Outlet connection 3/4” BSPM.

Materials
100 Litre actual capacity high density polyethylene break tanks (EN 13077).
Fitted with a 3/4” ball valve and type “AB” air gap, protecting incoming mains supply from a class 5 designated risk of contamination.
Float valve DN13 with proportional behaviour (50L/min at 3.0Bar) with stainless steel bowl.
Built-in pressure control starts and stops pump automatically which supplies water at constant pressure.
Prevents starting in the absence of water and avoids water hammer.
Does not require any maintenance or pre-charge.

Options
Extra pressure vessel to be installed in the discharge pipework.

Limitations
Maximum temperature 40 °C. Power supply 230 V / 1ph / 50 Hz.

Technical features

<table>
<thead>
<tr>
<th>Model</th>
<th>I  [A]</th>
<th>P1 [kW]</th>
<th>P2 [kW]</th>
<th>c  [µF]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST07.3/100.05</td>
<td>2.8</td>
<td>0.6</td>
<td>0.37</td>
<td>0.5</td>
</tr>
<tr>
<td>ST07.4/100AP</td>
<td>3.5</td>
<td>0.8</td>
<td>0.5</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Performance curves at 2900 rpm

S T07.3/100.05

ST07.4/100AP