Aquavar e-ABII

VARIABLE SPEED CONSTANT PRESSURE SYSTEMS

• 1 HP thru 5 HP - Pressure Booster Packages
• 1AB2 and 2AB2 Prewired Pump/Controller Kits

* Available up to 100 GPM systems
FEAT URES

The e-AB2 variable speed pump controller and complete booster package kits, provide an economical answer for municipal water district customers with low water pressure. Both domestic and light commercial applications can benefit. As water use increases, the controller changes pump speed to maintain pressure. Large supply tanks are eliminated and less wear and tear on your pump and motor.

Think of it as “Cruise Control” for your pump! The e-AB2 is available with a range of flow rates to handle homes with up to four baths, irrigation, filtration and fire suppression systems. Light commercial applications up to 100 GPM at 55 PSI boost. The e-AB2 is available as either a separate controller or as part of a complete pump package with everything you need to plumb it to a domestic water line.

The AquaBoost Advantage

Typical home water pressure drops when demand is high.

The AquaBoost makes up the pressure difference at peak demand for constant home water pressure.

AQUAVAR IPC CONTROLLER PROVIDES CONSTANT PRESSURE CONTROL PLUS MORE FOR THE 3 HP AND 5 HP MOTOR SIZES (REPLACES 3AB2 AND 5AB2 CONTROLLER)

NEW FEATURES

• Programmed to motor electrical characteristics; just select set pressure.
• Application specific “Start-Up Genie” guides you through quick and easy commissioning
• Removable, graphical control panel with display
• Alarm Log records the last 5 alarms
• Hand on, Auto on, and Off buttons for easy pump operation at the keypad - No toggling between local and remote operation!
• Capable of controlling up to 2 fixed speed pumps, with one standard drive
• Duplex variable speed pumping control with auto lead/lag and alternate
### e-AB2 HYDRAULIC SELECTION (e-HM and MCS)

<table>
<thead>
<tr>
<th>FEET</th>
<th>PSI BOOST</th>
<th>5-10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>20</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>58</td>
<td>25</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>69</td>
<td>30</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>10</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>81</td>
<td>35</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>10</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>92</td>
<td>40</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>11</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>104</td>
<td>45</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>11</td>
<td>11</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>116</td>
<td>50</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>11</td>
<td>11</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>127</td>
<td>55</td>
<td>2</td>
<td>6</td>
<td>6</td>
<td>11</td>
<td>11</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>139</td>
<td>60</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>150</td>
<td>65</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>12</td>
<td>12</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>162</td>
<td>70</td>
<td>3</td>
<td>6</td>
<td>7</td>
<td>12</td>
<td>12</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>173</td>
<td>75</td>
<td>3</td>
<td>7</td>
<td>8</td>
<td>12</td>
<td>12</td>
<td>13</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>185</td>
<td>80</td>
<td>3</td>
<td>7</td>
<td>8</td>
<td>12</td>
<td>13</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### e-AB2 CONFIGURATIONS (e-HM and MCS)

<table>
<thead>
<tr>
<th>Selection</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1151AB21HM04</td>
<td>115V 1HP 1&quot; disch, 1&quot; suct V6P N3R wired</td>
</tr>
<tr>
<td></td>
<td>1AB21HM04</td>
<td>230V 1HP 1&quot; disch, 1&quot; suct V6P N3R wired</td>
</tr>
<tr>
<td>2</td>
<td>1151AB21HM06</td>
<td>115V 1HP 1&quot; disch, 1&quot; suct V6P N3R wired</td>
</tr>
<tr>
<td></td>
<td>1AB21HM06</td>
<td>230V 1HP 1&quot; disch, 1&quot; suct V6P N3R wired</td>
</tr>
<tr>
<td>3</td>
<td>2AB23HM06</td>
<td>230V 2HP 1&quot; disch, 1&quot; suct V6P N3R wired</td>
</tr>
<tr>
<td>4</td>
<td>1151AB25HM03</td>
<td>115V 1HP 1&quot; disch, 1.25&quot; suct V15P N3R wired</td>
</tr>
<tr>
<td></td>
<td>1AB25HM03</td>
<td>230V 1HP 1&quot; disch, 1.25&quot; suct V15P N3R wired</td>
</tr>
<tr>
<td>5</td>
<td>2AB25HM04</td>
<td>230V 2HP 1&quot; disch, 1.25&quot; suct V15P N3R wired</td>
</tr>
<tr>
<td>6</td>
<td>2AB25HM05</td>
<td>230V 2HP 1&quot; disch, 1.25&quot; suct V15P N3R wired</td>
</tr>
<tr>
<td>7</td>
<td>2AB25HM06</td>
<td>230V 2HP 1&quot; disch, 1.25&quot; suct V15P N3R wired</td>
</tr>
<tr>
<td>8</td>
<td>3AVN35HM07</td>
<td>230V 3HP 1&quot; disch, 1.25&quot; suct IPC-N3R</td>
</tr>
<tr>
<td></td>
<td>3AVN15HM07</td>
<td>230V 3HP 1&quot; disch, 1.25&quot; suct IPC-N1</td>
</tr>
<tr>
<td>9</td>
<td>2AB22MS1G2D2</td>
<td>230V 2HP 1.25&quot; disch, 1.5&quot; suct V15P N3R wired</td>
</tr>
<tr>
<td>10</td>
<td>2AB210HM02</td>
<td>230V 2HP 1.25&quot; disch, 1.5&quot; suct V15P N3R wired</td>
</tr>
<tr>
<td>11</td>
<td>3AVN310HM03</td>
<td>230V 3HP 1.25&quot; disch, 1.5&quot; suct IPC-N3R</td>
</tr>
<tr>
<td></td>
<td>3AVN110HM03</td>
<td>230V 3HP 1.25&quot; disch, 1.5&quot; suct IPC-N1</td>
</tr>
<tr>
<td>12</td>
<td>5AVN310HM04</td>
<td>230V 5HP 1.25&quot; disch, 1.5&quot; suct IPC-N3R</td>
</tr>
<tr>
<td></td>
<td>5AVN110HM04</td>
<td>230V 5HP 1.25&quot; disch, 1.5&quot; suct IPC-N1</td>
</tr>
<tr>
<td>13</td>
<td>5AVN310HM05</td>
<td>230V 5HP 1.25&quot; disch, 1.5&quot; suct IPC-N3R</td>
</tr>
<tr>
<td></td>
<td>5AVN110HM05</td>
<td>230V 5HP 1.25&quot; disch, 1.5&quot; suct IPC-N1</td>
</tr>
<tr>
<td>14</td>
<td>5AVN32MS1J2K2</td>
<td>230V 5HP 1.25&quot; disch, 1.5&quot; suct IPC-N3R</td>
</tr>
<tr>
<td></td>
<td>5AVN12MS1J2K2</td>
<td>230V 5HP 1.25&quot; disch, 1.5&quot; suct IPC-N1</td>
</tr>
<tr>
<td>15</td>
<td>5AVN315HM03</td>
<td>230V 5HP 1.5&quot; disch, 2&quot; suct IPC-N3R</td>
</tr>
<tr>
<td></td>
<td>5AVN115HM03</td>
<td>230V 5HP 1.5&quot; disch, 2&quot; suct IPC-N1</td>
</tr>
</tbody>
</table>

* 1 HP available in 115 volt input models. Items 8, 11 thru 15 do not include tank. Recommend bladder tank, sized to 20% of pump flow (gpm). Pressure Transducer supplied with all configurations.

**NOTE:** PSI is boosting pressure, NOT total system pressure.
### ADDENDUM: e-AB2 WITH HSC SELECTION

<table>
<thead>
<tr>
<th>PSI</th>
<th>FEET</th>
<th>GPM</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>23</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>116</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>139</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>162</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>90</td>
<td>208</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>219</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1AB2HSC07B 230V 1HP 1&quot; disch, 1.25&quot; suct V15P wired</td>
</tr>
<tr>
<td></td>
<td>1151AB2HSC07B 115V 1HP 1&quot; disch, 1.25&quot; suct V15P wired</td>
</tr>
<tr>
<td>2</td>
<td>2AB2HSC15B 230V 2HP 1&quot; disch, 1.25&quot; suct V15P wired</td>
</tr>
<tr>
<td>3</td>
<td>2AB2HSC20B 230V 2HP 1&quot; disch, 1.25&quot; suct IPC-N3R</td>
</tr>
<tr>
<td>4</td>
<td>3AVN1HSC30B 230V 3HP 1&quot; disch, 1.25&quot; suct IPC-N1</td>
</tr>
<tr>
<td></td>
<td>3AVN3HSC30B 230V 3HP 1&quot; disch, 1.25&quot; suct IPC-N3R</td>
</tr>
</tbody>
</table>

**NOTES:**
- MAWP is 125 PSI; performance per chart accounts for zero lift conditions
- Motors are 230V three-phase, ODP design
- 1HP and 2HP packages - Tank included, wiring by GWT; supplied with Aquavar AB2 drive
- 3HP packages - Tank not included and wiring by others; supplied with Aquavar IPC drive
- Pressure transducer supplied with all configurations.
### ADDENDUM: e-AB2 WITH NPE SELECTION

<table>
<thead>
<tr>
<th>PSI</th>
<th>FEET</th>
<th>GPM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>10</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>35</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>46</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>58</td>
<td>3</td>
</tr>
<tr>
<td>30</td>
<td>69</td>
<td>2</td>
</tr>
<tr>
<td>35</td>
<td>81</td>
<td>3</td>
</tr>
<tr>
<td>40</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>104</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>127</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2AB2HSC20B 230V 2HP 1&quot; disch, 1.25&quot; suct V15P wired</td>
</tr>
<tr>
<td>2</td>
<td>3AVN1HSC20B 230V 3HP 1&quot; disch, 1.25&quot; suct IPC-N1</td>
</tr>
<tr>
<td></td>
<td>3AVN3HSC20B 230V 3HP 1&quot; disch, 1.25&quot; suct IPC-N3R</td>
</tr>
<tr>
<td>3</td>
<td>5AVN12ST1J9G2 230V 5HP 1.25&quot; disch, 1.5&quot; suct IPC-N1</td>
</tr>
<tr>
<td></td>
<td>5AVN32ST1J9G2 230V 5HP 1.25&quot; disch, 1.5&quot; suct IPC-N3R</td>
</tr>
</tbody>
</table>

**NOTES:**
- NPE product is 316L Stainless Steel
- MAWP is 125 PSI; performance per chart accounts for zero lift conditions
- Motors are 230v three-phase, TEFC design
- 2HP packages - Tank included, wiring by GWT; supplied with Aquavar AB2 drive
- 3HP and 5HP packages - Tank not included and wiring by others; supplied with Aquavar IPC drive
- Pressure transducer supplied with all configurations.
INPUT AND OUTPUT POWER (VOLTAGE AND PHASE)

- All 1AB2 and 2AB2 require single-phase input power
  - All will work on 1Ø, 208-230V input power
  - 1151AB2's will work on 1Ø, 115V input power

1151AB21HM04
- 115v SINGLE PHASE INPUT
- 1 HP variable speed controller (1AB2); Nema 3R
- Pump (e-HM 4 stg) and Tank (V6P) included
- Wall mount set; Transducer; pre-wired

1AB21HM04
- 230v SINGLE PHASE INPUT
- 1 HP variable speed controller (1AB2); Nema 3R
- Pump (e-HM 4 stg) and Tank (V6P) included
- Wall mount set; Transducer; pre-wired

1151AB21HM06
- 115v SINGLE PHASE INPUT
- 1 HP variable speed controller (1AB2); Nema 3R
- Pump (e-HM 6 stg) and Tank (V6P) included
- Wall mount set; Transducer; pre-wired

1AB21HM06
- 230v SINGLE PHASE INPUT
- 1 HP variable speed controller (1AB2); Nema 3R
- Pump (e-HM 6 stg) and Tank (V6P) included
- Wall mount set; Transducer; pre-wired

2AB23HM06
- 230v SINGLE PHASE INPUT
- 2 HP variable speed controller (2AB2); Nema 3R
- Pump (e-HM 6 stg) and Tank (V6P) included
- Wall mount set; Transducer; pre-wired

1151AB25HM03
- 115v SINGLE PHASE INPUT
- 1 HP variable speed controller (1AB2); Nema 3R
- Pump (e-HM 3 stg) and Tank (V15P) included
- Wall mount set; Transducer; pre-wired

1AB25HM03
- 230v SINGLE PHASE INPUT
- 1 HP variable speed controller (1AB2); Nema 3R
- Pump (e-HM 3 stg) and Tank (V15P) included
- Wall mount set; Transducer; pre-wired

2AB25HM04
- 230v SINGLE PHASE INPUT
- 2 HP variable speed controller (2AB2); Nema 3R
- Pump (e-HM 4 stg) and Tank (V15P) included
- Wall mount set; Transducer; pre-wired

2AB25HM05
- 230v SINGLE PHASE INPUT
- 2 HP variable speed controller (2AB2); Nema 3R
- Pump (e-HM 5 stg) and Tank (V15P) included
- Wall mount set; Transducer; pre-wired

2AB25HM06
- 230v SINGLE PHASE INPUT
- 2 HP variable speed controller (2AB2); Nema 3R
- Pump (e-HM 6 stg) and Tank (V15P) included
- Wall mount set; Transducer; pre-wired

3AVN35HM07
- 230v SINGLE PHASE INPUT
- 3 HP variable speed controller (Aquavar IPC); Nema 3R
- Pump (e-HM 7 stg) and Transducer (included)
- Tank (not included) and wiring (by others)

3AVN15HM07
- 230v SINGLE PHASE INPUT
- 3 HP variable speed controller (Aquavar IPC); Nema 1
- Pump (e-HM 7 stg) and Transducer (included)
- Tank (not included) and wiring (by others)

2AB22MS1G2D2
- 230v SINGLE PHASE INPUT
- 2 HP variable speed controller (2AB2); Nema 3R
- Pump (MCS) and Tank (V15P) included
- Wall mount set; Transducer; pre-wired

2AB210HM02
- 230v SINGLE PHASE INPUT
- 2 HP variable speed controller (2AB2); Nema 3R
- Pump (e-HM 2 stg) and Tank (V15P) included
- Wall mount set; Transducer; pre-wired

3AVN310HM03
- 230v SINGLE PHASE INPUT
- 3 HP variable speed controller (Aquavar IPC); Nema 3R
- Pump (e-HM 3 stg) and Transducer (included)
- Tank (not included) and wiring (by others)
INPUT AND OUTPUT POWER (VOLTAGE AND PHASE) continued

3AVN110HM03
• 230v SINGLE PHASE INPUT
• 3 HP variable speed controller (Aquavar IPC); Nema 1
• Pump (e-HM 3 stg) and Transducer (included)
• Tank (not included) and wiring (by others)

5AVN310HM04
• 230v SINGLE PHASE INPUT
• 5 HP variable speed controller (Aquavar IPC); Nema 3R
• Pump (e-HM 4 stg) and Transducer (included)
• Tank (not included) and wiring (by others)

5AVN110HM04
• 230v SINGLE PHASE INPUT
• 5 HP variable speed controller (Aquavar IPC); Nema 3R
• Pump (e-HM 4 stg) and Transducer (included)
• Tank (not included) and wiring (by others)

5AVN310HM05
• 230v SINGLE PHASE INPUT
• 5 HP variable speed controller (Aquavar IPC); Nema 3R
• Pump (e-HM 5 stg) and Transducer (included)
• Tank (not included) and wiring (by others)

5AVN110HM05
• 230v SINGLE PHASE INPUT
• 5 HP variable speed controller (Aquavar IPC); Nema 1
• Pump (e-HM 5 stg) and Transducer (included)
• Tank (not included) and wiring (by others)

5AVN32MS1J2K2
• 230v SINGLE PHASE INPUT
• 5 HP variable speed controller (Aquavar IPC); Nema 3R
• Pump (MCS) and Transducer (included)
• Tank (not included) and wiring (by others)

5AVN12MS1J2K2
• 230v SINGLE PHASE INPUT
• 5 HP variable speed controller (Aquavar IPC); Nema 1
• Pump (MCS) and Transducer (included)
• Tank (not included) and wiring (by others)

5AVN315HM03
• 230v SINGLE PHASE INPUT
• 5 HP variable speed controller (Aquavar IPC); Nema 3R
• Pump (e-HM 3 stg) and Transducer (included)
• Tank (not included) and wiring (by others)

5AVN115HM03
• 230v SINGLE PHASE INPUT
• 5 HP variable speed controller (Aquavar IPC); Nema 1
• Pump (e-HM 3 stg) and Transducer (included)
• Tank (not included) and wiring (by others)

CONTROLLERS ONLY

1AB2
• 4.2 Amp, 230v 1HP Nema 3R, transducer & cable
• Single phase Input; Three phase Output

1151AB2
• 4.2 Amp, 115v 1HP Nema 3R, transducer & cable
• Single phase Input; Three phase Output

2AB2
• 6.9 Amp, 230v 2HP Nema 3R, transducer & cable
• Single phase Input; Three phase Output

AVB10030C0X0X0X0X1
• 10.6 Amp, 230v 3HP Nema 3R, transducer & cable
• Single phase Input; Three phase Output

AVB10030A0X0X0X0X1
• 10.6 Amp, 230v 3HP Nema 1, transducer & cable
• Single phase Input; Three phase Output

AVB10050C0X0X0X0X1
• 16.7 Amp, 230v 3HP Nema 3R, transducer & cable
• Single phase Input; Three phase Output

AVB10050A0X0X0X0X1
• 16.7 Amp, 230v 3HP Nema 1, transducer & cable
• Single phase Input; Three phase Output
**INPUT AND OUTPUT POWER (VOLTAGE AND PHASE) WITH HSC**

- All 1AB2 and 2AB2 require single-phase input power
  - All will work on 1Ø, 208-230V input power
  - 1151AB2 will work on 1Ø, 115V input power

1AB2HSC07B
- 230V SINGLE PHASE INPUT
- 1 HP variable speed controller (1AB2); Nema 3R
- Pump (HSC07B) with Tank (V15P) included
- Wall mount set; Transducer; pre-wired

1151AB2HSC07B
- 115V SINGLE PHASE INPUT
- 1 HP variable speed controller (1AB2); Nema 3R
- Pump (HSC07B) with Tank (V15P) included
- Wall mount set; Transducer; pre-wired

2AB2HSC15B
- 230V SINGLE PHASE INPUT
- 2 HP variable speed controller (2AB2); Nema 3R
- Pump (HSC15B) with Tank (V15P) included
- Wall mount set; Transducer; pre-wired

3AVN1HSC20B
- 230V SINGLE PHASE INPUT
- 3 HP variable speed controller (Aquavar IPC); Nema 1
- Pump (HSC20B) and Transducer included
- Tank (not included) and wiring (by other)

3AVN3HSC20B
- 230V SINGLE PHASE INPUT
- 3 HP variable speed controller (Aquavar IPC); Nema 3R
- Pump (HSC20B) and Transducer included
- Tank (not included) and wiring (by other)

---

**INPUT AND OUTPUT POWER (VOLTAGE AND PHASE) WITH HSC**

- All controllers output three-phase, 230 Volt power
- All pumps are equipped with three-phase motors

---

**Input and Output Power (Voltage and Phase) with HSC**

- All 1AB2 and 2AB2 require single-phase input power
  - All will work on 1Ø, 208-230V input power
  - 1151AB2 will work on 1Ø, 115V input power

**1AB2HSC07B**
- 230V SINGLE PHASE INPUT
- 1 HP variable speed controller (1AB2); Nema 3R
- Pump (HSC07B) with Tank (V15P) included
- Wall mount set; Transducer; pre-wired

**1151AB2HSC07B**
- 115V SINGLE PHASE INPUT
- 1 HP variable speed controller (1AB2); Nema 3R
- Pump (HSC07B) with Tank (V15P) included
- Wall mount set; Transducer; pre-wired

**2AB2HSC15B**
- 230V SINGLE PHASE INPUT
- 2 HP variable speed controller (2AB2); Nema 3R
- Pump (HSC15B) with Tank (V15P) included
- Wall mount set; Transducer; pre-wired

**3AVN1HSC20B**
- 230V SINGLE PHASE INPUT
- 3 HP variable speed controller (Aquavar IPC); Nema 1
- Pump (HSC20B) and Transducer included
- Tank (not included) and wiring (by other)

**3AVN3HSC20B**
- 230V SINGLE PHASE INPUT
- 3 HP variable speed controller (Aquavar IPC); Nema 3R
- Pump (HSC20B) and Transducer included
- Tank (not included) and wiring (by other)
SUGGESTED AB2 INSTALLATION FOR MUNICIPAL WATER SYSTEM

Home Supply

Check Valve*

Isolation Valves

Unions

Water Main

Check Valve*

Isolation Valves

Unions

**Figure 1**

*Spring check valve - provided by installer

SUGGESTED AQUABOOST INSTALLATION FOR WELL PUMP SYSTEM

Home Supply

Controller

Disconnect

Controller

Disconnect

Well Supply

Check Valve*

Isolation Valves

Unions

Atmospheric Storage Tank

**Figure 2**

*Spring check valve - provided by installer
Residential and Commercial Water Systems

### CentriPro

#### Performance at 0 suction

**3HM06**
- **Variable Speed Curves**
- **60 Hz**
- **2AB23HM06**
- **30 Hz**

**1HM04, 1HM06**
- **Variable Speed Curves**
- **60 Hz**
- **1AB21HM06**
- **1151AB21HM04**
- **30 Hz**

#### Capacity (Q) vs. Total Dynamic Head (H)

**FEET**
- **U.S. GPM**
- **CAPACITY (Q)**
- **TOTAL DYNAMIC HEAD (H)**
- **1HM04, 1HM06**
- **3HM06**

PAGE 10
Residential and Commercial Water Systems

CentriPro

**10HM02, 10HM03**
Performance at 0 suction
Variable Speed Curves

**10HM04, 10HM05**
Performance at 0 suction
Variable Speed Curves
Residential and Commercial Water Systems

CentriPro

FEET

TOTAL DYNAMIC HEAD (H)

CAPACITY (Q)

2ST1F9D2, 2ST1H9B2, 2ST1J9G2

Performance at 0 suction
Variable Speed Curves

2ST1F9D2, 2ST1H9B2, 2ST1J9G2

Performance at 0 suction
Variable Speed Curves
AQUAVAR ABII CONTROLLER FEATURES

**Input Power** – 208-230V ±15%, single phase (controller only)

**Output Power** – Up to 230V three phase (based on input voltage). Motor rated for 208-230V, ±10%.

**Maximum Output Current** –
- 4.2 amps - 1AB2 (1 HP)
- 6.9 amps - 2AB2 (2 HP)

**Input Controls** – Up and down buttons to set pressure.

**Signal Lights** – Power on, pump running, inverter stopped, pump stopped, standby, faults/errors.

**Electrical Efficiency** – Over 95% at full load

**Protection Against** – Short circuit, under voltage, overload, motor temperature, dead heading, run out, suction loss, sensor fault, bound pump, over voltage, static discharge. **Note:** Suction loss/run out is set for minimum 10 psi at discharge!

**Ambient Temperature** – 34º F to 104º F

**Maximum Humidity** – 95% at 104º F, non-condensing

**Air Pollution** – Avoid mounting in areas with excessive dust, acids, corrosives and salts.

**Approvals** – UL, cUL (Listing on Controller Only)

**Controller Enclosure** – Outdoor, NEMA 3R, IP 43 (Rain-tight)

**Mounting** – Wall mount with mounting hardware.

**Cooling** – Convection with cast aluminum heat sink.
- 3 HP, 5 HP with temperature fan

**Transducer** – 0.5 - 4.5 VDC with 5 VDC power supply, 100 psi range, 10-foot 3-wire shielded cable.

**Input Wire** – 5 feet of 14, 10 or 8 gauge cable. Depending on size, cable is pre-wired to controller and motor conduit box.

**Output Wire** – 10 feet of 14 gauge cable. Cable is pre-wired to controller and pump motor (when provided).

*Low input voltage may affect motor operation.

PRESSURE RANGE

Nominal Range – Field adjustable from 20 - 85 psi, total system pressure.

**WARNING**: DO NOT SET REQUIRED SYSTEM PRESSURE ABOVE 85 PSI. SEVERE DAMAGE TO PLUMBING COULD RESULT. PLUMB RELIEF VALVE OUTSIDE OR TO A DRAIN.
AQUAVAR IPC FEATURES

**Input Power** – 200V to 240V ±10%, single phase (controller only)

**Output Power** – Up to 230V three phase (based on input voltage).

**Maximum Output Current** – 10.6 amps (3 HP)
– 16.7 amps (5 HP)

**Input Controls** – Keypad; LCD graphical display

**Signal Lights** – Power on, inverter stopped, standby, warning/alarms; auto ON.

**Electrical Efficiency** – Over 95% at full load


**Ambient Temperature** – 34°F to 114°F

**Maximum Humidity** – 93% at 114°F, non-condensing

**Air Pollution** – Avoid mounting in areas with excessive dust, acids, corrosives and salts.

**Approvals** – (Listing on Controller Only)

**Controller Enclosure** – Outdoor, NEMA 3R, IP 43 (Rain-tight); Indoor, NEMA 1, IP 21

**Mounting** – Wall mount

**Cooling** – Convection with cast aluminum heat sink.
– With temperature fan

**Transducer** – 4-20 mA power supply, 300 psi range, 16-foot shielded cable.

**Input Wire** – Supplied by installer, refer to instruction manual

**Output Wire** – Supplied by installer, refer to instruction manual

*Low input voltage may affect motor operation.

PRESSURE RANGE

Nominal Range – Field adjustable through 300 psi, total system pressure.

**WARNING**

DO NOT SET REQUIRED SYSTEM PRESSURE ABOVE 85 PSI. SEVERE DAMAGE TO PLUMBING COULD RESULT. PLUMB RELIEF VALVE OUTSIDE OR TO A DRAIN.
DIMENSIONS (For Reference Only - Do not use for construction purposes)

MCS PUMP WITH TANK AND TEE

**Capacities** – to 120 GPM

**Rotation** – Right hand clockwise, viewed from motor end

**Materials** – 316L stainless steel casing 316L impeller

**Motor** – 1 HP, ODP, Three Phase, 208-230/460V

Overload protection, starters, heaters not required. Dimensions are in inches.

- Pump Connections – 1¼ x 1½ NPT
- **Maximum Temperature of Water** – 120° F
- **NOTE:** Tank Liquid Temperature Limit is 120° F
- Pump Liquid Temperature Limit is 140° F
- **Maximum System Working Pressure** – 125 psi
- **Seal** – Carbon / Silicon Carbide / EPR
DIMENSIONS (For Reference Only - Do not use for construction purposes)

**e-HM PUMPS**

**Capacities** – to 12 GPM (1HM)
- to 23 GPM (3HM)
- to 45 GPM (5HM)

**Rotation** – Right hand clockwise, viewed from motor end

**Materials** – 316L stainless steel for all liquid handling components

**Motor** –
- 1 HP, TEFC, Three Phase, 208-230/460V
- 1.5 HP, TEFC, Three Phase, 208-230/460V
- 2 HP, TEFC, Three Phase, 208-230/460V

**Overload protection, starters, heaters not required. Dimensions are in inches.**

---

**Pipe Connections** – 1 x 1 NPT (1HM/3HM)
- 1 x 1¼ NPT (5HM)

**Maximum Temperature of Water** – 120º F

**NOTE:** Tank Liquid Temperature Limit is 120º F
Pump Liquid Temperature Limit is 212º F

**Maximum System Working Pressure** – 145 psi

**Seal** – Carbon / Silicon Carbide / EPR
**DIMENSIONS** (For Reference Only - Do not use for construction purposes)

**e-HM PUMPS**

**Capacities** – to 45 GPM (5HM)  
  to 75 GPM (10HM)  
  to 127 GPM (15HM)

**Rotation** – Right hand clockwise, viewed from motor end

**Materials** – 316L stainless steel for all liquid handling components

**Motor** – 2 HP, TEFC, Three Phase, 208-230/460V (5HM/10HM)  
  – 3 HP, TEFC, Three Phase, 208-230/460V (10HM)  
  – 4 HP, TEFC, Three Phase, 208-230/460V (10HM)  
  – 5.5 HP, TEFC, Three Phase, 208-230/460V (10HM/15HM)

Overload protection, starters, heaters not required. Dimensions are in inches.

**Pipe Connections** – 1 x 1¼ NPT (5HM)  
  – 1¼ x 1½ NPT (10HM)  
  – 1½ x 2 NPT (15HM)

**Maximum Temperature of Water** – 120° F

**NOTE:** Tank Liquid Temperature Limit is 120° F  
  Pump Liquid Temperature Limit is 212° F

**Maximum System Working Pressure** – 85 psi

**Seal** – Carbon / Silicon Carbide / EPR

Overload protection, starters, heaters not required. Dimensions are in inches.
### ALTERNATE PUMP MODELS FOR USE WITH 1AB2 CONTROLLER

- **MCC** – ½, ¾, 1 HP, 3 ph, ODP or TEFC motor versions
- **3642** – ½, 1½, 2 HP, 3 ph, ODP or TEFC motor versions
- **GT073, GT103** – 3 ph, ODP or TEFC motor versions
- **HSC07, HSC10** – 3 ph, ODP or TEFC motor versions
- **5GB, 7GB** – ½, ¾, 1 HP, 3 ph, ODP or TEFC motor versions
- **NPE** – ½, ¾, 1 HP, 3 ph, ODP or TEFC motor versions
- **NPO** – ½, ¾, 1 HP, 3 ph, ODP or TEFC motor versions
- **ICS** – ½, ¾, 1 HP, 3 ph, ODP or TEFC motor versions
- **LB** – ½ and ¾ HP, 3 ph, ODP or TEFC motor versions

**Note:** These pumps are not currently offered as a packaged kit. All units require three phase motors. Size pumps and controllers according to service factor amps of the motor.

### ALTERNATE PUMP MODELS FOR USE WITH 2AB2 CONTROLLER

- **3642** – ½, 1½, 2 HP, 3 ph, ODP or TEFC motor versions
- **GT** – ½, 1½, 2 HP, 3 ph, ODP or TEFC motor versions
- **HSC** – 1½, 2 HP, 3 ph, ODP or TEFC motor versions
- **10GB** – 1½, 2 HP, 3 ph, ODP or TEFC motor versions
- **NPE** – ½, 2 HP, 3 ph, ODP or TEFC motor versions
- **NPO** – ½, 2 HP, 3 ph, ODP or TEFC motor versions
- **ICS** – 1½, 2 HP, 3 ph, ODP or TEFC motor versions

### SUBMERSIBLE PUMPS:
Use Aquavar SOLO or S-Drive controllers for submersible applications, they have filters built-in and are programmed for submersibles; alternatively Aquavar IPC with use with DV/DT filter can be used for submersible applications.

### PACKAGED HARDWARE WITHOUT PUMP AND MOTOR (SEE PRICING PAGE)

<table>
<thead>
<tr>
<th>Part Number 15K40</th>
<th>Part Number 15K108</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KIT INCLUDES:</strong></td>
<td><strong>KIT INCLUDES:</strong></td>
</tr>
<tr>
<td>1) Tank – V6P (2 gallons)</td>
<td>1) Tank – V15P</td>
</tr>
<tr>
<td>2) 1¼” Bronze Discharge Tee – AV20-6</td>
<td>2) 1¼” Bronze Discharge Tee – AV20-12</td>
</tr>
<tr>
<td>3) Pipe Plug – ½”, 6K68</td>
<td>3) Pipe Plug – ½”, 6K68</td>
</tr>
<tr>
<td>4) Pressure Gauge</td>
<td>4) Pressure Gauge</td>
</tr>
</tbody>
</table>