Aquavar®
INTELLIGENT PUMP CONTROLLER
150 - 600 Horsepower
Introduction

The Aquavar® Intelligent Pump Controller (IPC) is designed to provide variable frequency pumping control of speed, pressure, flow and level over a wide range of submersible and above ground applications. This Brochure contains information on features and benefits of the NEW Aquavar IPC extension to include sizes from 150 HP - 600 HP. The higher horsepower extension includes the same software, programming, and troubleshooting procedures as the lower horsepower range. Here are just a few of the features and benefits of this versatile product:

- Removable, graphical control panel with display
- Fully backlit display with large text makes the control pad easy to read
- My Personal Menu allows user to focus on specific user selected and saved parameters
- Alarm Log key for quick access to last 5 alarms and maintenance events
- Hand on, Auto on, and Off buttons for easy pump operation at the keypad - No toggling between local and remote operation
- Modbus® RTU, included in standard drive - Other communications available with option cards
- Duplex variable speed pumping control with auto lead/lag and alternate
- USB Connectivity - Remotely commission and monitor through PC software
- Standard dual DC-link reactors - Reduces the level of harmonics similar to a 5% AC line reactor without the voltage drop across the full load range
- EMC/RFI filters designed to reduce drive noise emissions and interference to strict standards
- Motor preheat feature to prevent motor condensation in cold environments

Your wish is Aquavar’s command!

The proprietary CentriPro Start-Up Genie guides you through quick and easy commissioning. Take advantage of the complete Genie with 10 sections to configure applications with pump protections, I/O options, and Duplex operation, or for the more straightforward applications just set your motor information, operation mode and “Autoset” the rest of the parameters. With support for the most common control configurations, the Genie reduces set-up and configuration time to about 15 minutes!
MORE Enclosures!

With native enclosures for IP20/IP00, NEMA 1, 12, and 3R, Aquavar IPC can provide the right protection for your indoor or outdoor application. Choose NEMA 1 and NEMA 12 for indoor applications where you need protection from dust. Choose the rugged NEMA 3R to protect from rain and snow. Xylem can also provide an IP20 / IP00 Aquavar IPC for mounting into a separate enclosure with other equipment.

MORE Pumping!

For applications with large ranges of flow, or if you just want an inline spare the Aquavar has you covered. Aquavar has the ability to run two additional constant speed pumps to increase your flow to maintain a constant pressure. The Duplex configuration gives you two variable speed pumps working synchronously to provide more efficient operation. Program Aquavar for Duty Standby and you can run one pump at a time, and have your spare pump ready for action!

MORE Communications!

Modbus® RTU is the standard communication protocol on the Aquavar via the RS485 serial port. Using the communication option cards you can expand the Aquavar capabilities to include: Modbus® TCP, Profibus, Profinet, DeviceNet, Lon Works, and Ethernet IP.

MORE Intelligence!

The capabilities of Aquavar can be extended with the use of I/O expansion cards available to ship with the drive as a factory option, or as repair parts that can be installed in the field. Additional analog and digital inputs/outputs allow for customized control of your system. The addition of temperature monitoring can help with preventative maintenance and reduce downtime!
Specifications

Ratings and Enclosures

- IP20/IP00 Chassis, TYPE 1, TYPE 12, TYPE 3R
- 150 - 600 HP (frame D - E) wall or floor mounted
- Ambient temperature 14º F - 113º F (-10ºC - 45ºC). Higher temperatures can be achieved by derating the output amperage of the drive 10% for up to 122º F (50ºC).
- At altitudes from 0 to 1000 meters (0 to 3300 feet) nameplate rated current is available. Derate for altitudes above 1000 (3300 feet) with a maximum operating altitude of 3000 meters (9900 feet). (Consult factory for applications above 3000 meters (9900 feet)).
- Relative humidity lower than 95% without condensation

Electrical Characteristics

<table>
<thead>
<tr>
<th>INPUT POWER</th>
<th>OUTPUT POWER</th>
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<tbody>
<tr>
<td>- 3 phase 380 V to 480 V ±10%</td>
<td>- 3 phase from 0 to Vsupply</td>
</tr>
<tr>
<td>- 3 phase 525 V to 690 V ±10%</td>
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<tr>
<td>- Frequency 50 or 60 Hz, ±2Hz</td>
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