PowerXL series
Booster pump applications

Advancing your pumping system

The PowerXL™ drives family is engineered to provide a complete solution for your demanding pumping applications. The PowerXL DE1, DC1, DA1 and DG1 provide the reliable performance you need while also generating the energy savings you want. With advanced yet easy-to-use features, precise system control and dedicated product support, the PowerXL drives are designed to optimize your pumping systems.

Reliable

- Industry-leading ambient temperature range capable of –30 °C to +60 °C
- Conformal coated boards, NEMA® Type 1/IP21, NEMA Type 12/IP54 and IP66 designs provide increased environmental protections
- Multiple cooling fan operation modes designed to extend fan life and reduce maintenance

Energy efficient

- On-board active energy control algorithm to provide 2–10% increased savings over competitors' "out of the box" solutions
- Unique energy savings calculator to display actual savings vs. an across-the-line starter over different time periods

Ease of use

- Full text LCD keypad featuring copy/paste functionality and soft keys for faster navigation
- Quick Start Wizard, four pre-configured applications, and PC Tools for simpler commissioning
- Detailed fault history with time stamp and operating conditions for quicker troubleshooting
- EtherNet/IP Assist Tool for easy tag integration into Rockwell RSLogix™ 5000 software

Service and support

- Standard two-year warranty with extensions available through certified commissioning
- Dedicated team of application engineers and technical resources available to provide pre-sale and post-sale support
- Aftermarket program providing spare parts, service and training classes

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RoHS COMPLIANT

Pump energy savings

- **Active energy control**—on-board algorithm to dynamically adjust the volts per hertz curve to find the lowest possible power output to maintain the required pump output
- **Sleep mode**—reduces power consumption by having the drive shut off when operating below desired pressure range instead of pumping continuously at slow speeds
- **Single-phase applications**—realize all the benefits and cost savings in areas where only single-phase power is available (available for 120 V, 230 V, and 480 V)

Advanced pumping system reliability

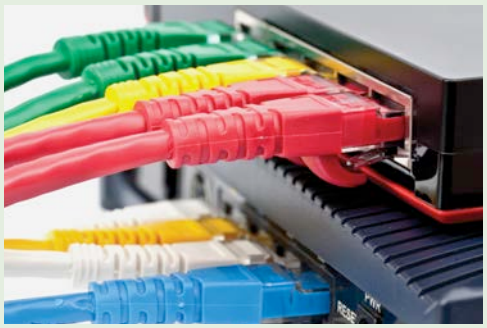
- **Auto-restart functionality**—bring critical pumps back online after a power loss to reduce downtime and potential system failures
- **Scheduled cleaning cycles**—utilize real time clock to run pump cleaning cycles of rapid acceleration and deceleration to prevent sediment buildup and clogging
- **Reduced water hammer**—prevent unwanted water hammer and cavitation through smooth acceleration and deceleration ramps controlled by a pressure sensor

Pump protections

- **Password protection**—lock access to parameter editing to prevent undesired user interaction in the field
- **Skip frequency ranges**—reduce vibration and noise from pumps by preventing operation in resonance causing pump speeds
- **Stall protection**—stop motor and pump operation when pressure rises due to a downstream valve being closed

Advanced pump control

- **Multi-pump control**—provide precise control over a wide range of flow by bringing pumps online as needed while also alternating pump sequence to keep run time equal across the system
- **Dual PID control loops**—control your pump system with two built-in PID loops and eliminate the need for external control systems
- **Auto motor identification run**—automatically tunes drive parameters to adjust to actual pump conditions to provide better performance and efficiency
- **Flying start**—smoothly start a spinning pump in either direction to reduce stress on impellers



Pump system connectivity

- **Engineering units for PID control**—simplify operator interaction by using actual engineering units for flow rates or pressure when adjusting and monitoring the PID control
- **Built-in communications**—integrate the drive into the booster system without external communication cards with EtherNet/IP, Modbus® TCP, Modbus RTU, BACnet MS/TP and CANopen available on-board
- **Expandable I/O**—vast offering of on-board I/O with expansion available to allow for direct wiring of pump control, monitoring and status indications

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

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