TOPCO
It's all about control

BRX PLC

Designed, Manufactured, Supported in the USA

2 YEAR WARRANTY

BRX

LEADERSHIP IN ENGINEERING

INDUSTRIAL AUTOMATION

PRESENTED BY Design World

2016 LEADERSHIP WINNERS

Over 25 years of PLC hardware design knowledge has gone into the BRX design.

Low cost options for any application

Whether your controller needs are simple or complex, the BRX platform has a cost-saving solution for you. With four form factors to choose from and many optional features available, you'll get exactly what you need at a price you didn't expect.

All BRX controllers can be DIN-rail or panel mounted and come standard with a software-selectable RS232/RS485 serial port, 1MB of internal data storage with 32GB of optional microSD storage, and a user-changeable, hot-swappable Pluggable Option Module (POM) slot. Built-in hardware interrupts are also standard and allow for precise control when timing is essential.

POMs for on-demand networking - purchase one or all and change as often as you need.

M Series

The BRX M series is a simple (no built-in I/O) controller that can be used for a variety of purposes including machine data logging and Ethernet networking. If local I/O becomes a necessity, the M series can be expanded with your choice of up to 8 expansion I/O modules. With this series, you decide exactly how much and what type of local and remote I/O your controller needs.

BRX
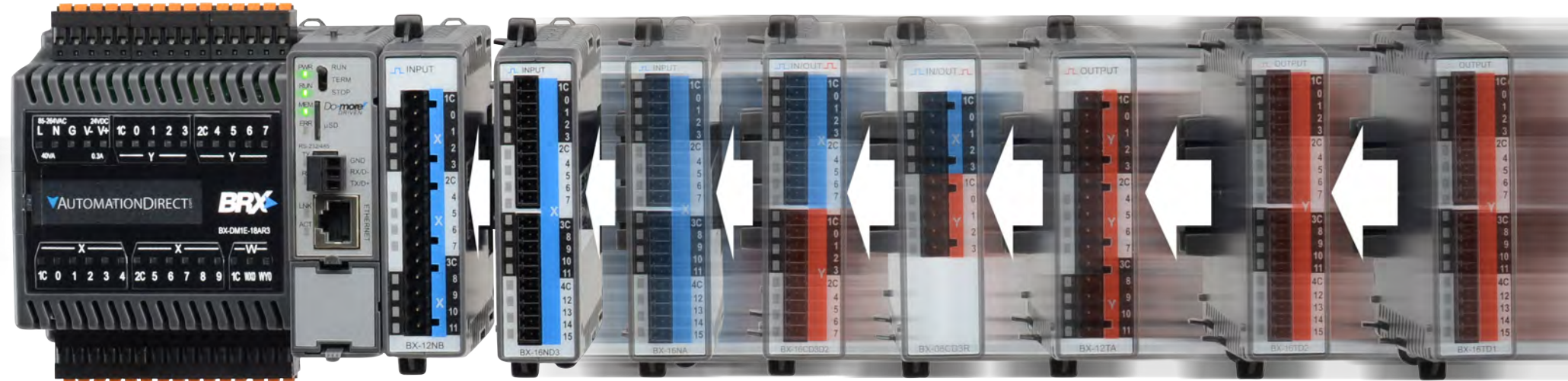### Making Innovation Affordable!

10-point Series

The BRX 10-point series includes all the standard features plus 10 built-in discrete I/O points (AC, DC and relay options available). With the exception of models with relay outputs, all of the on-board discrete I/O can be configured for current-protected high-speed functions up to 250 kHz. Relay output models have high-speed inputs only. Software-selectable analog I/O with your choice of 0-5VDC, 0-10VDC, +/-5VDC, +/-10VDC, 4-20mA or +/-20mA input/output ranges and a 10/100 Mbps Ethernet port are available on select units. The 10-point series is also expandable with up to 2 additional expansion I/O modules, giving you the flexibility to only add the local and remote I/O that your application needs.
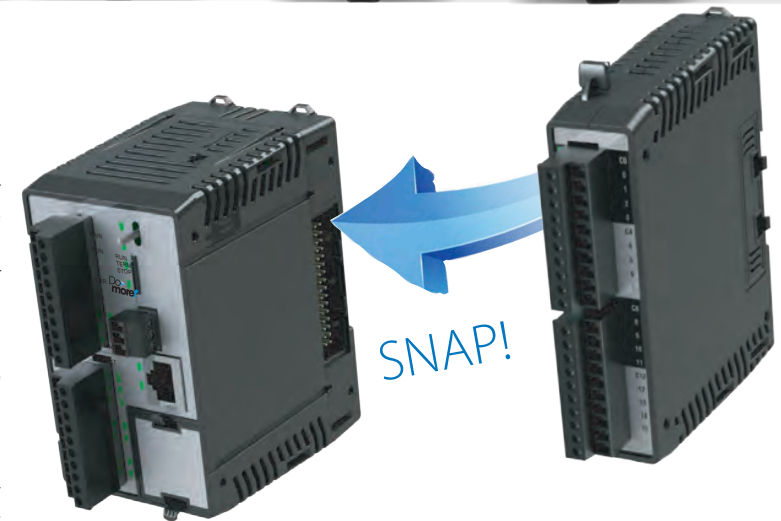
18-point Series

The BRX 18-point series has all of the benefits of the 10-point series plus an additional 8 discrete I/O points for 18 total. 14 of the 18 I/O points (on non-relay models) can be utilized for high-speed I/O applications up to 250 kHz. Ethernet communication and built-in analog I/O points are also options with this series. Depending on model, the 18-point series will allow expansion with 4 to 8 additional expansion I/O modules, giving you the flexibility to only add the local and remote I/O that your application needs.

36-point Series

The BRX 36-point series takes I/O count one step further with 36 onboard discrete I/O points, 18 of which (on non-relay models) are capable of protected 250 kHz high-speed I/O. Six user-configurable analog I/O points are available on the Ethernet capable units and the 36-point series can be expanded with 4 to 8 additional expansion I/O modules, giving you the flexibility to only add the local and remote I/O that your application needs.
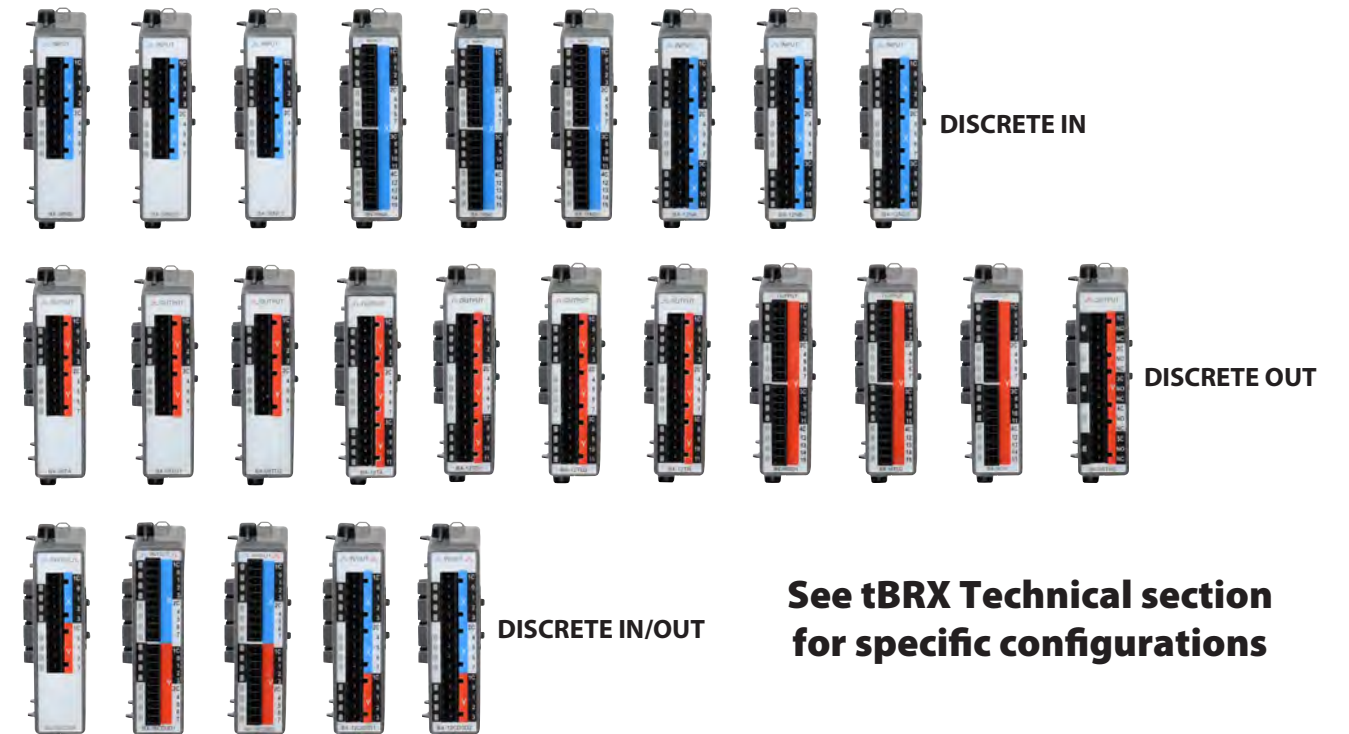
Expansion is a snap!

The BRX platform requires no base or backplane and the PLC units can operate as stand-alone controllers or be expanded with up to 8 additional I/O modules (depending on model). 27 discrete I/O expansion modules are currently available with 8, 12 and 16-point versions, allowing the BRX system to expand up to 164 discrete I/O points total. The stackable design of the BRX platform gives you the ability to purchase only the I/O required for your particular application.

Easy to connect and easy to use, these expansion modules snap into place with an integrated, hands-free latching system. Once in place and latched, the system becomes one solid, rugged unit even without the assistance of DIN rail. Each new I/O module connected will be autoconfigured in the software and ready to use in your program. If you need to separate the expansion modules, simply use the quick release tabs to unlatch and remove.

SNAP!

DISCRETE IN

DISCRETE OUT

DISCRETE IN/OUT

See tBRX Technical section for specific configurations

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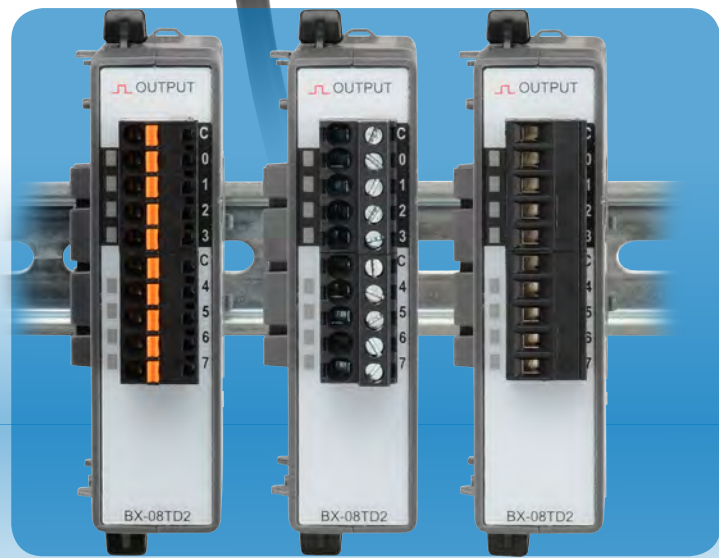
FREE Technical Support
Located in USA

5-second wiring system for BRX!

BRX▶

ZIPLink Modules
Save time by using pre-wired cables

Why spend the time wiring each I/O point to a terminal when you can get them prewired? ZIPLink pre-wired cables and terminals save you valuable time, keep your installation clean and efficient, and use half the space at a fraction of the cost of standard terminal blocks.

Terminate frustration and wire the easy way...

The BRX PLC system components do not not ship with pre-selected I/O terminal blocks. This allows you to select the termination that best fits your application and allows you to only pay for the termination you use.

The BRX PLC platform offers several options when it comes to wire terminations. We want wiring to be as painless as possible, and by far the easiest route to take is our ZIPLinks pre-wired solution. ZIPLink modules and cables are available for the BRX system and they not only provide tremendous wiring time savings but can also provide clean wireways with easy field-traceable connections, and confidence that your panel wiring is correct.

If you decide to use the standard terminal blocks with your BRX controller, they are available separately in easily-removable 90 and 180-degree screw clamp or 90-degree spring clamp versions.

**180°
Spring Clamp**

**180°
Screw**

**90°
Screw**

With the larger BRX PLCs (18 and 36-point units) and the expansion modules, a wider (5mm) spaced connector is provided for easy insertion of large MTW wires. Don't cram your bigger gauge wires into PLC clamps that are too small ever again. With BRX, even wiring is better!

BRX - Your Automation Foundation

Start small, build BIG

From the start, we wanted the BRX PLC platform to offer the options needed for any project design, from a small machine to a complex process. But that wasn't good enough! We also wanted BRX PLCs to change and grow right along with the project - through design, build, testing, installation, startup and future expansion phases. That's why the BRX PLC platform allows for easy system modifications to meet your needs and keep you satisfied long after the initial design.

The BRX platform provides hassle-free I/O expansion for up to 164 points locally with thousands more available through remote expansion, hot-swappable POMs for on-demand networking modifications, and expandable data logging from the included 1MB to 32GB with the addition of a micro SD card. With these features you can start small and build something BIG. That's why we call the Do-more! BRX PLC platform your "Automation Foundation".

Get in motion...it's easy with BRX

All BRX PLC models with 24VDC I/O have high-speed inputs and outputs included. This high-speed I/O can be used to track rapid encoder pulses, drive stepper motors, or can be configured for other counter/timer, axis/pulse, pulse-width-modulated or table-driven functions:

- Timer/Counter: BRX PLCs can be configured to count input pulses, or measure the time between pulses, up to a 250kHz maximum pulse rate.
- Axis/Pulse: BRX PLCs can have up to three axis of control with an additional virtual axis for internal control and following applications.
- Pulse Width Modulation (PWM): The high-speed outputs can also be used to generate a carrier frequency with varying pulse widths.
- Table-driven: Tables of preset values can be used to turn the high-speed outputs ON and OFF based on the pulse count values of one high-speed input.

The BRX PLC platform not only makes motion affordable but also user-friendly. The Do-more Designer software includes many motion-based instructions that vary in complexity from simple move profiles to electronic cam tables. With BRX, you get the exact motion control you need without any frustrating obstacles.
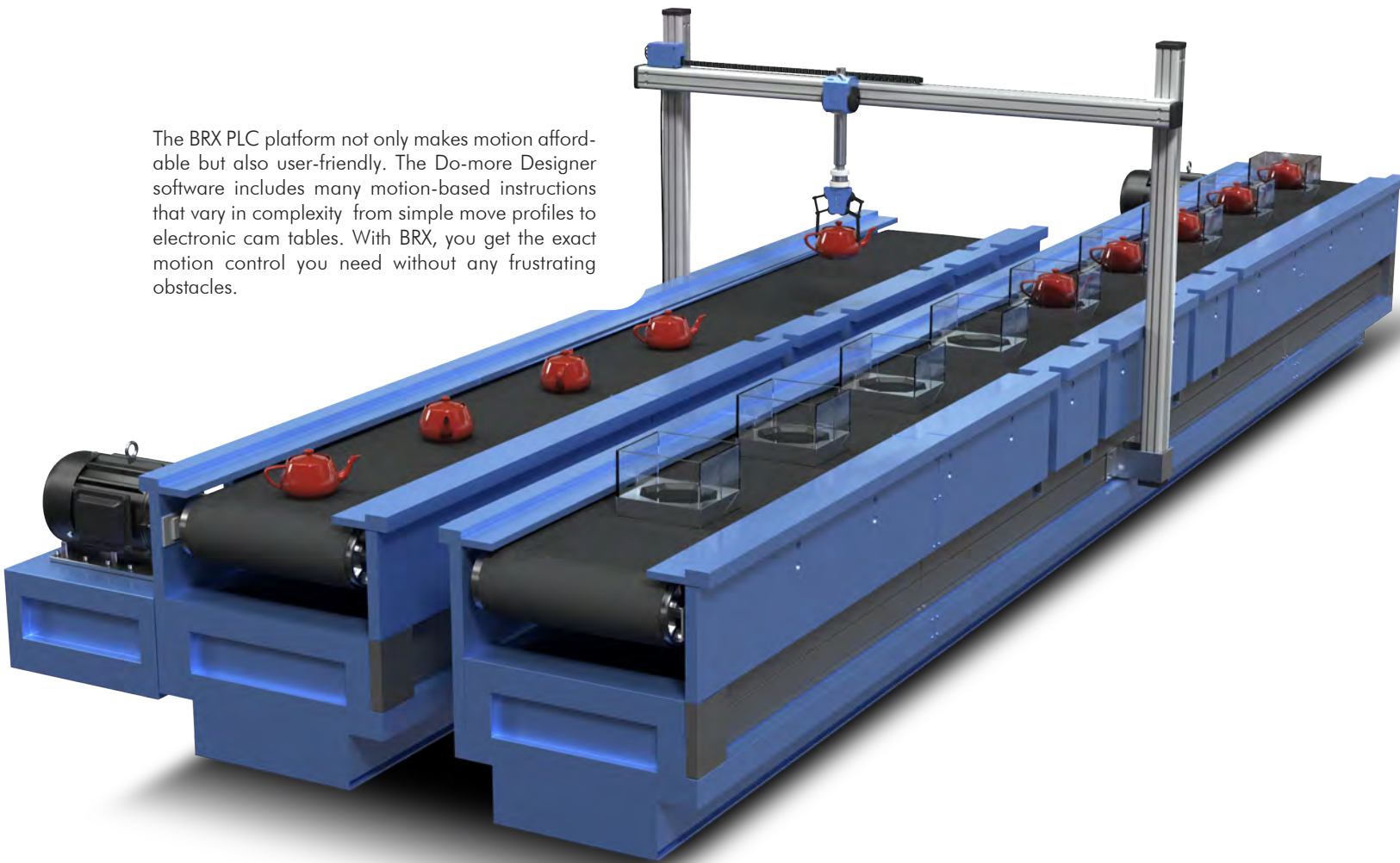
BRX - Your Automation Foundation

EASY PID

Thousands of PID loops are possible with BRX controllers and the Do-more Designer software has incorporated many features to make PID control a smooth process. Simply define the PID structure by filling in the blanks of the PID Closed Loop function block and the structure elements (.SP, .PV, .GAIN, .BIAS, etc.) will be available to use in your program.

When you are ready to tune the loop, Do-more Designer has many tools like PID Overview and PID View with Autotune that you can use to quickly get your process tuned and operating properly.

Connectors are separated into small functional groups so removing one connector won't disturb the other signals.

Monitor your PID status right from the instruction with the integrated status display.
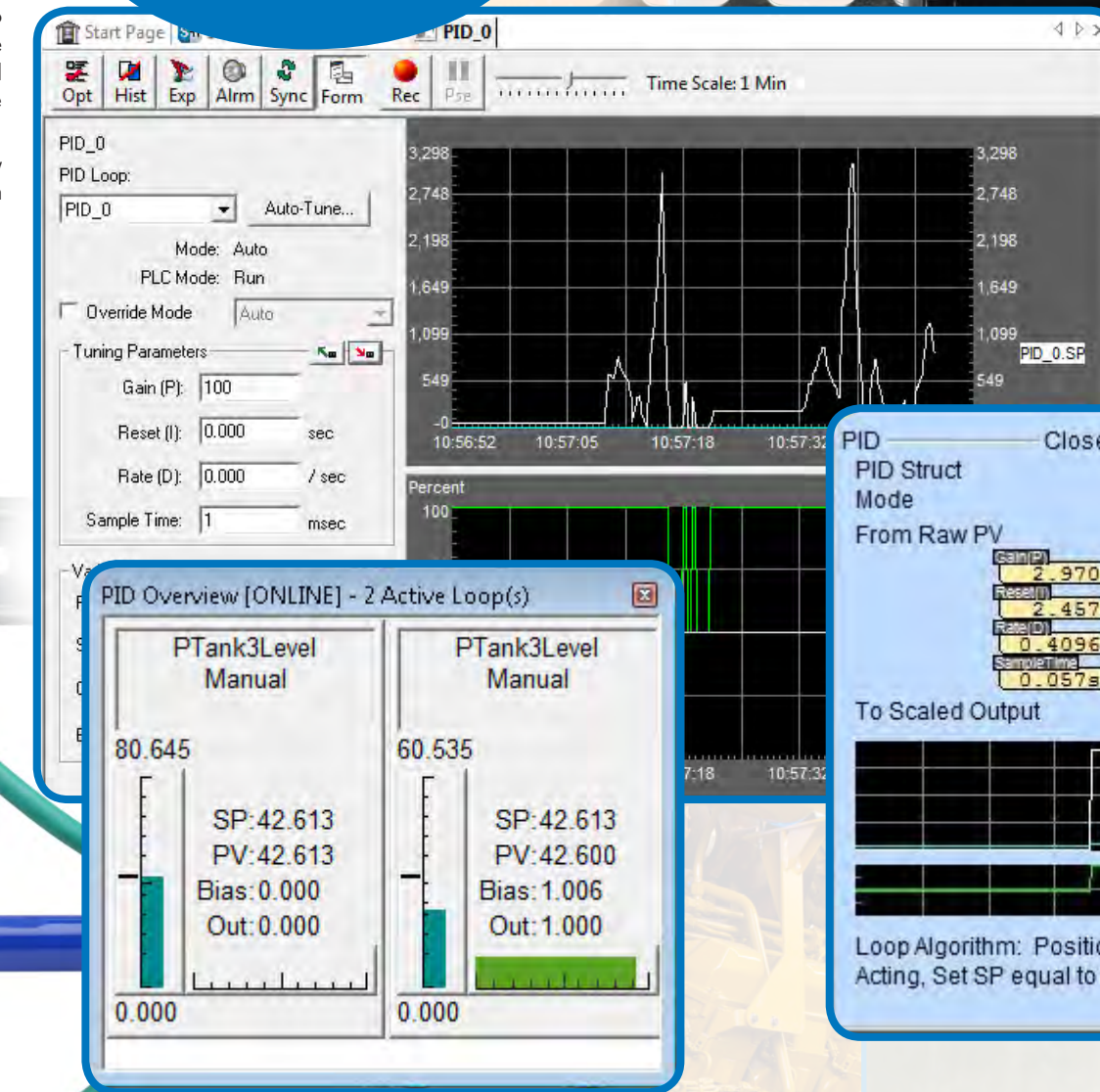
Control temperature, pressure, level and any other process variable easily and affordably with BRX and low-cost components from AutomationDirect.
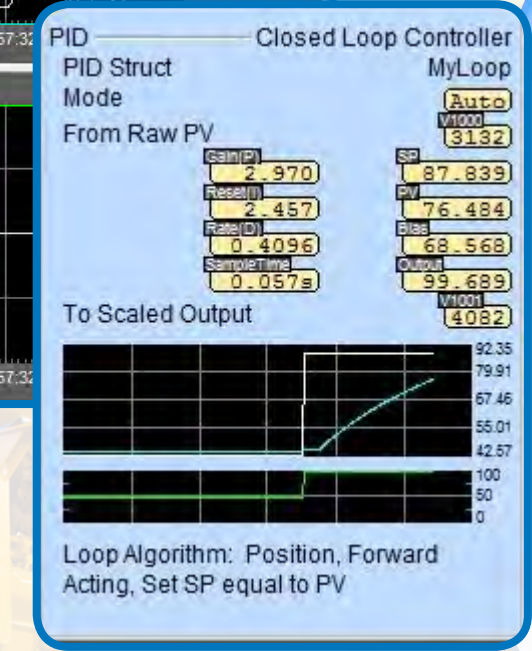
Multiple features for multiple industries

The BRX PLC platform incorporates many features that are perfect for a variety of applications. Whether you need ASCII communication for your barcode scanners, or 24VAC and pulse width modulation for your building controls, the BRX family of affordable PLCs has got you covered.

Modbus®

EtherNet/IP™

ASCII

BRX

Do more DRIVEN