

IntelliVAC™

 Allen-Bradley

Product Profile

Advanced Digital Control of Vacuum Contactors

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The Allen-Bradley Bulletin 1503VC IntelliVAC™ and IntelliVAC™ Plus controllers offer a superior and efficient means of controlling vacuum contactors.

The family of IntelliVAC controllers are a quantum leap beyond traditional electromechanical control circuits. Here are just a few of the beneficial characteristics of the IntelliVAC family:

- The performance and flexibility of digital control, allowing the control of a wide array of contactor types (400A, 800A, Electrically Held and Mechanical Latch) with one module
- Enhanced reliability as a result of embedded self-diagnostics and better coordination between unit power fuses and the vacuum contactor drop-out time
- Increased productivity with features like power loss ride through and contactor anti-kiss, which were previously offered as optional features
- The ability to efficiently expand IntelliVAC controllers to IntelliVAC Plus
- Motor and process protection with delayed restart built-in (IntelliVAC Plus)



IntelliVAC™ & IntelliVAC™ Plus

Advanced Control for Medium Voltage Contactors

IntelliVAC and IntelliVAC Plus controllers are used to control the Bulletin 1502 medium voltage vacuum contactors. Together, they are primary components within the Bulletin 1500/1900 Centerline® Medium Voltage Motor Controllers. The features and flexibility of IntelliVAC allow it to be used in an unlimited number of medium voltage controller applications.

IntelliVAC Plus provides the additional benefit of including multi-contactor control algorithms. This greatly simplifies control circuit devices and wiring for applications such as reversing and solid-state reduced voltage controllers.



800 Amp

400 Amp

Bulletin 1502 Vacuum Contactors

The Rockwell Automation logo features the Allen-Bradley logo on the left, the Dodge logo in the middle, and the Rockwell Software logo on the right. The word "Rockwell Automation" is written in a large, bold, sans-serif font across the bottom.

IntelliVAC™

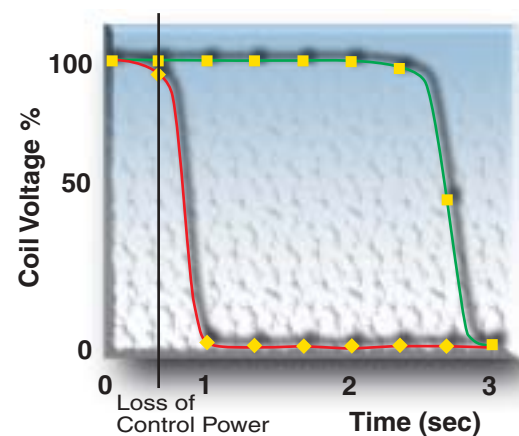
IntelliVAC Control Module

- The IntelliVAC control module is available with a universal input voltage (100 - 250 V AC, 50 - 60 Hz or DC)
- Consistent vacuum contactor pick-up time
- Selectable and repeatable vacuum contactor drop-out times
- Manual altitude compensation (-1,000 to 5,000 metres)
- Power loss ride-through (TDUV)
- Anti-kiss protection
- Temporary motor jog function
- Status indication
- Supports the upgrade to IntelliVAC Plus



Sustain Productivity with Time Delay Under Voltage (TDUV)

The TDUV logic included within IntelliVAC enables an MV vacuum contactor to ride through brief power outages. IntelliVAC monitors the supply voltage and if a minimum threshold is reached, the vacuum contactor coils are supplied power from an external (optional) capacitor for a pre-determined time (typically up to 2 seconds.)

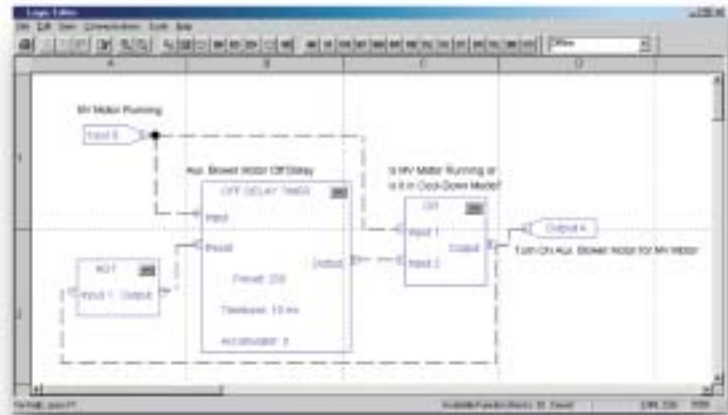
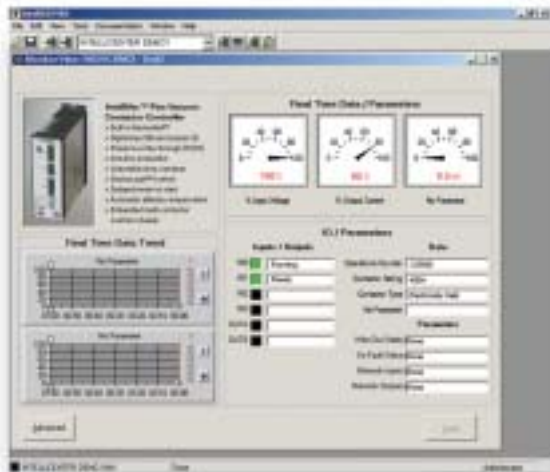


■ without TDUV ◆ with TDUV

IntelliVAC™ Plus

IntelliVAC™ Plus Control Module

- Plugs into IntelliVAC™ Control Module
- Digital control Inputs (4) & Outputs (2), for customer use
- DeviceLogix™ control (program with RS NetWorx for DeviceNet)
- DeviceNet™ communications
- Compatibility with IntelliCENTER™
- Embedded multi-contactor control schemes (up to 5 vacuum contactors, in a Master-Slave set-up)
- Automatic altitude compensation (-1,000 to 5,000 metres)
- Operational & diagnostic information (ie. operations counter, failure to close due to the integrity of the vacuum bottle being compromised)
- Delayed motor re-start (programmable times)



IntelliVAC Plus is IntelliCENTER Ready

IntelliVAC Plus is compatible with IntelliCENTER software, Rockwell Automation's window into low and medium voltage MCCs. When IntelliVAC Plus is applied in Bulletin 1500 and 1900 medium voltage starters, you get the following benefits from IntelliCENTER:

- All IntelliVAC Plus controllers come pre-wired to DeviceNet, including the set up of network node addressing
- Medium voltage vacuum contactor status information (for example open, closed, faulted)
- Real-time status of the IntelliVAC Plus input and output points
- Operational data for each medium voltage vacuum contactor controlled by IntelliVAC Plus (for example operations counter, operational time, fault conditions)
- The additional benefits of IntelliCENTER software include on-line Event Logging, Spare Parts List, Unit Drawings (in AutoCAD format) and User Manuals (PDF format)
- Complete system testing at Rockwell Automation's factory, ensures a smooth start-up

IntelliVAC Plus Unleashes the Power of DeviceLogix™

Plug into the world of Complete Automation by exploiting the embedded power of DeviceLogix. Control logic is simply programmed with standard function blocks using an easy to learn Logic Editor within RS NetWorx for DeviceNet. Using the DeviceLogix capabilities with IntelliVAC Plus reduces DeviceNet traffic, off-loads logic processing at a central processor and allows local control during network faults.

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IntelliVAC and IntelliVAC Plus:

Input Voltage	AC – 100 to 250 V rms, 47 to 63 Hz DC – 100 to 250 V
Input Current	Idle (maximum) IntelliVAC – 125 mA IntelliVAC Plus – 225 mA
	Inrush – 15 A maximum
	Sealed (maximum) IntelliVAC – 0.925 A IntelliVAC Plus – 1.0 A
Command Voltage	AC – 100 to 240 V rms DC – 24 to 250 V
Status Output Contacts	AC – 250 V rms, 5 A, R load DC – 30 V, 5 A, R load
Standards and Approval	UL, CSA, IEC, CE

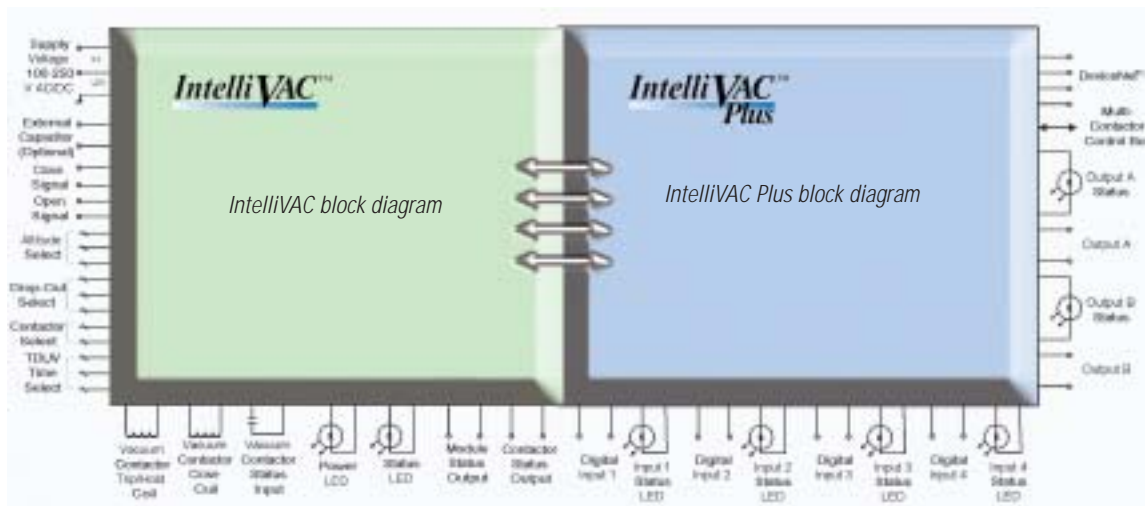
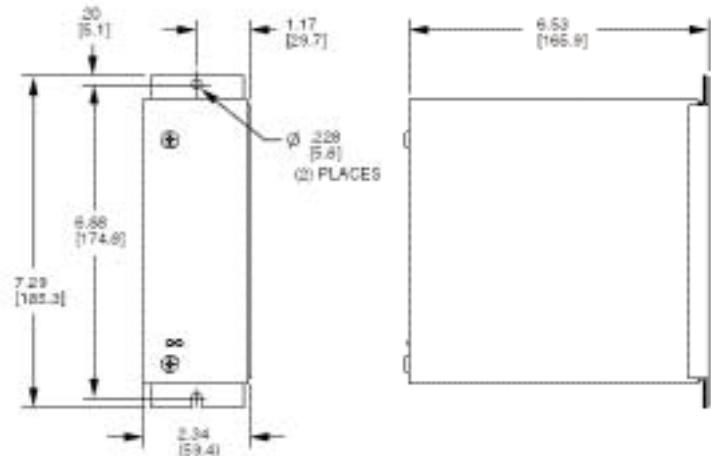
IntelliVAC Plus:

Inputs 1 to 4	AC – 100 to 240 V rms DC – 24 to 250 V
Output A to B Contacts	AC – 250 V rms, 10 A, R load DC – 30 V, 10 A, R load

Catalog Numbers

IntelliVAC	1503VC-BMC1	Electrically Held Vacuum Contactors
	1503VC-BMC2	Mechanically Latched Vacuum Contactors
IntelliVAC Plus	1503VC-EMC1	Electrically Held Vacuum Contactors
	1503VC-EMC2	Mechanically Latched Vacuum Contactors
	1503VC-EMU	Upgrade of IntelliVAC to IntelliVAC Plus

Dimensions in Inches [mm] Common to IntelliVAC and IntelliVAC Plus



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