

1503VC IntelliVAC Control Module

The Allen-Bradley Bulletin 1503VC IntelliVAC controller (1503VC-BMC5) offers a superior, efficient, and flexible means of controlling Bulletin 1502 vacuum contactors. The IntelliVAC controller offers a scalable solution for multiple medium voltage control applications. A wire harness for 1502 vacuum contactors is generally required.

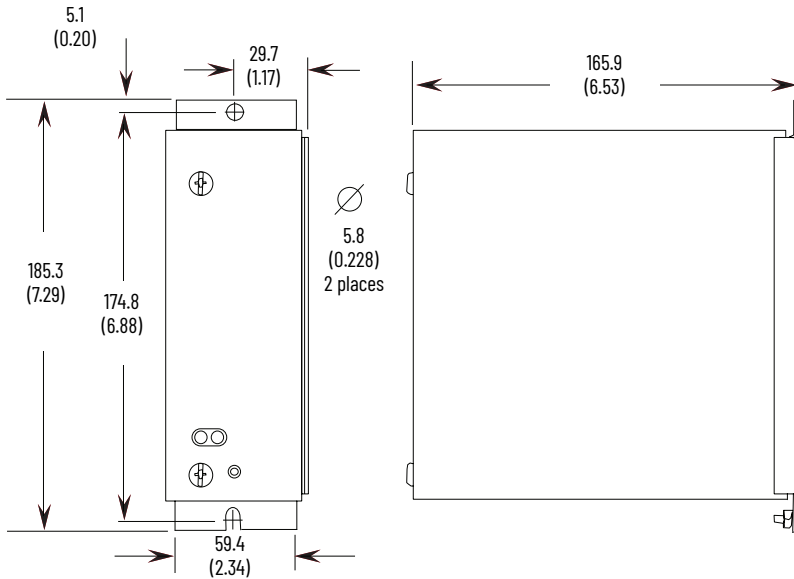
IntelliVAC provides basic control capabilities for 450 A and 800 A contactors (electrically held and mechanical latch) using a single device. It offers enhanced reliability through better diagnostics and coordination between the power fuses and the vacuum contactor drop-out time. Productivity is improved using the power loss ride through (TDUV) and contactor re-closing control features.

- Universal input voltage (110...240V AC, 50/60 Hz or 110...250V DC)
- Consistent vacuum contactor pick-up time
- Selectable and repeatable vacuum contactor drop-out times (50, 75, 100, 130, 150, 175, 200, or 240 ms)
- Altitude compensation (-1000...+5000 m) eliminates mechanical hardware changes at high altitude (450 A vacuum contactors)
- Power loss ride-through logic (TDUV) with selectable drop out time (0.2, 0.5, 1.0, or 2.0 s) requires only an external capacitor
- Re-closing control features (anti-kiss and anti-pumping protection)
- Status indication (LEDs and relay outputs) allows integration in control system and aids troubleshooting
- Temporary motor jog function (separate input) to allow process set-up
- Delayed motor re-start prevents rapid cycling of vacuum contactor, protecting the connector motor



Dimensions

IntelliVAC Control Module Dimensions



Control Power Selector Assembly

A selector switch and power receptacle are provided to allow 'Normal', 'Off', and 'Test' sources of control power for the IntelliVAC control module. A 115V AC receptacle, suitable for use in North America, is provided as part of the 1503C-CPS1.

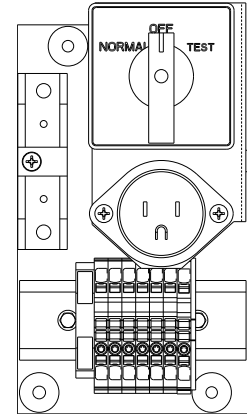


Table 18 - Control Power Selector Assembly Catalog Numbers⁽¹⁾

Description	Cat. No.
With 120V AC receptacle for North American power cords.	1503C-CPS1
With provisions for mounting a power receptacle (provided by customer).	1503C-CPS2

(1) For use with IntelliVAC control module.

Specifications

Table 19 - IntelliVAC Control Module Specifications

IntelliVAC Catalog Numbers ⁽¹⁾		Vacuum Contactor Type			
1503VC-BMC5	IntelliVAC	Electrically Held or Mechanical Latch			
Ratings and Approvals					
Input Voltage		AC	110...240V, 47...63 Hz ⁽²⁾		
		DC	110...250V		
Input Current ⁽³⁾		AC ⁽²⁾		Inrush (max.)	25 A (1/2 cycle)
				Idle (max.)	125 mA
				Close (max.)	11.3 A
				Hold (max.)	300 mA
				Latch Trip (max.)	7.0 A
		DC		Inrush (max.)	25 A
				Idle (max.)	35 mA
				Close (max.)	4.8 A
				Hold (max.)	100 mA
				Latch Trip (max.)	3.7 A
Command Inputs		AC	110...240V, 9 mA max. ⁽²⁾		
		DC	50...250V, 9 mA max.		
Status Output Contacts		AC	250V, 5 A, R load ⁽²⁾		
		DC	30V, 5 A, R load		
Standards and Approval		cULus, IEC, CE			

(1) A wire harness is required for Bulletin 1502 vacuum contactors when IntelliVAC is used.

(2) All AC values are rms, except where noted.

(3) The maximum currents shown are for either the 450A or 800A Bulletin 1502 vacuum contactors. Close current duration is 200 milliseconds.