5.16. Digital Output - Bussed 24VDC – CC-PDOB01

Function

The Digital Output bussed 24VDC (DO24V) module provides reliable 24V digital output signals to control other process equipment as well as solenoid valves and interposing relays. The DO24V can support high energy outputs to reduce the number of external components in the output loop.

Notable Features

- Extensive internal diagnostics to ensure data integrity
- Optional redundancy
- Direct/Reverse output support
- Safe-state (FAILOPT) behaviors
- "Fuse-less" short circuit protection
- Latched, pulsed or pulse-width modulated output (per channel)
- Galvanic isolation

Bussed 24VDC DO

The Digital Output Bussed 24VDC has provisions for both internal and external field power excitation. As a bussed output device, all of the outputs share a common return (ground). All outputs get their power from the same source, which can be either the system power supply or an externally connected 24V power supply. When selection is from an external source, outputs can be galvanically isolated from the Series C power system.

Fuse-less Short Circuit Protection

This unique feature allows a short circuit to exist without blowing any fuses. When a particular channel is shorted, internal circuits detect this and remove power to the field connection. The channel remains de-energized until the short circuit is repaired.

FAILOPT

Series C DO module will support FAILOPT parameter on a per channel basis. The output can be directed by configuration to either HOLD THE LAST VALUE, or SHED to a SAFE VALUE. The safe value can be configured by the user.

Detail Specifications - Bussed 24VDC DO

Parameter	Specification			
Input / Output Model	CC-PDOB01 - 24Volt Digital Output , Field Isolated, Bussed output			
IOTA Model Numbers	CC-TDOB01	Non Redundant	9"	
	CC-TDOB11	Redundant	12"	
Output Channels	32			
Output Type	Source			
Load Voltage 15	30 VDC Maximum			
Load Current (A group of 8 channels consists of channels: 1-8, 9-16, 17-24, and 25-32)	(Absolute Maximum)	Per Channel	Per 8 Channels	Per Module
	No Short Condition(1)	0.5A	4A	6A
	One Short Condition(1)	0.5A	3A	6A
	Two Short Condition(1)	0.5A	1.5A	6A
Galvanic Isolation	1500 VAC RMS or ±1500 VDC			