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## **Bulletin 1203-Gd1, Gk1, Gm1 Three Wire Control Application Note #**

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### PURPOSE

The purpose of this document is to provide guidelines for wiring and control schemes for SCANport devices including Bulletin 1305 and 1336 PLUS AC Drives. This document is to be used as a suggestion only. Users must ensure that installations meet applicable codes and are suitable for the existing conditions.

### WHAT THIS NOTE CONTAINS

This document contains information and a simple example of a PLC5 ladder program that allows you to do three wire control through a 1203-GD1,GM1,GK1.

### INTENDED AUDIENCE

This application note is intended to be used by personnel familiar with the hardware components and programming procedures necessary to operate the SCANport device. It is also assumed that the user has some familiarity with a PLC5 and ladder programming

### WHERE IT IS USED

The diagrams, parameter settings, and auxiliary hardware used in this application note are designed to address specific issues in many different applications. Some changes by the user may be necessary to apply the concepts of this document to a specific application.

### Assumptions and Comments

1. User Stop bit will be maintained until the drive begins to stop.
2. User Start bit will be maintained until the drive starts.
3. User Fault Reset will be maintained until the drive receives the fault reset command.
4. If a fault occurs and is reset, the User Start bit must transition from false to true before the drive will start.
5. Drive setup as Rack 2 with BT disabled (SW3-1 = Off) and Logic Command/Status enabled (SW3-2 = On).
6. Three-wire User Stop is shown as I:000/00 -- this could be any bit address.
7. Three-wire User Stop is shown as I:000/01 -- this could be any bit address.
8. User Fault Reset is shown as I:000/02 -- this could be any bit address.

Rung 2:0

Drive STOP rung -- if the User STOP bit is true the Drive Stop bit will be on.

User		Drive
Stop		STOP
I:000		Command
		O:020
+-----] [-----] [-----] ( )-----+		
00		00

Rung 2:1

Drive START rung -- if the User START bit is true and the drive is enabled the Drive Start bit will be on.

User	Drive	Drive
Start	Enabled	START
I:000	I:020	Command
		O:020
+-----] [-----] [-----] ( )-----+		
01	00	01

Rung 2:2

Drive Fault Reset rung -- whenever the User Fault Reset bit is true the Drive Fault Reset bit will be on.

User		Drive
Fault		Fault
Reset		Reset
I:000		Command
		O:020
+-----] [-----] [-----] ( )-----+		
02		03

Rung 2:3

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