



ERRATA SHEET

THIS ERRATA SHEET CONTAINS CORRECTIONS OR CHANGES MADE AFTER THE PUBLICATION OF THIS USER MANUAL.

AutomationDirect.com

1-800-633-0405

PRODUCT FAMILY: DURAPULSE GS3 AC Drives

USER MANUAL NUMBER: GS3-M

ERRATA SHEET NUMBER: GS3-M Errata #5

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For the complete GS3 DURApulse user manual, please refer to the AutomationDirect website:
<http://www.automationdirect.com/static/manuals/g3m/g3m.html>

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Chapter 1, pg 1-8:

Remove note regarding 30-day warranty:

"There is no 30-day money-back guarantee on any drive over 10 hp."

Chapter 3, pg 3-2:

Add sentence under "LED Indicators" as shown:

The combination of solid RUN and flashing STOP LEDs indicates that the drive has an active RUN command, but has a zero speed reference.

Chapter 3, pgs 3-7,10; P0.01:

Revise the setting range of P0.01 as shown:

P0.01 Motor Nameplate Amps

Range: Drive Rated Amps x 0.4 to Drive Rated Amps x 1.0

Default Setting: Drive Rating (A)

Chapter 3, pgs 3-9,13; P4.00; Chapter 4, pg 4-40; P4.00:

Add note for parameter P4.00 (Source of Frequency Command) as follows:



When configured for "Frequency determined by digital keypad Up/Down, the drive will reset the commanded frequency to zero hertz on a power cycle. This happens only if the drive faults when it powers down (if its running when it loses power). If the drive is stopped when it loses power (and doesn't trigger a Low Voltage Fault), the drive will retain the last set speed when powered back up.

Chapter 3, pg 3-15:

Add note before "Auto-Tune Instructions" regarding parameter P3.00 (Source of Frequency Command) as follows:



P3.00 must be set to zero (0) before auto-tuning; failure to do so will result in an ---ERR--- indication.

Chapter 4, pg 4-9,61; P6.10 & P6.11:

Denote that a setting of zero (0) disables parameters P6.10 & P6.11:

Protection Parameters			
GS3 Parameter & Description		Range	Default
P6.10	Over-Current Stall Prevention during Acceleration	20 to 200% [a setting of 0 disables this parameter]	150
P6.11	Over-Current Stall Prevention during Operation	20 to 200% [a setting of 0 disables this parameter]	150

P6.10 Over-Current Stall Prevention during Acceleration**P6.11 Over-Current Stall Prevention during Operation**

Range: 20 to 200% [a setting of 0 disables these parameters]

Default Setting: 150

Chapter 4, pg 4–30; P3.02–P3.10:

Revise and add important note for Multi-Function Input (DI) Parameters 3.02–3.10, settings 19 and 20:

- 19† 1st/2nd Source Select (N.O.)
 - 20† 1st/2nd Source Select (N.C.)
- † Parameter settings 19 and 20 are available only with firmware v1.04 or higher (refer to P9.39).
 NOTE: If using 1st/2nd Source selection, the GS3 drive will continue to operate in the last commanded state when switched from 1st to 2nd source, or from 2nd to 1st source. If stopped when switched, the GS3 drive will remain stopped. If running when switched, the GS3 drive will continue to run.
 The feature 1st/2nd Source Select is available in the GS3 drive by configuring one of the digital inputs (DI3 thru DI11), to a value of 19 or 20. If used, 1st/2nd Source Select affects the following parameters: P3.00 – Source of Operation Command, P3.31 – 2nd Source of Operation Command, P4.00 – Source of Frequency Command, P4.13 – 2nd Source of Frequency Command.

Chapter 4, pg 4–35; P3.02–P3.10 settings 19 & 20 (Multi-Function Input – 1st/2nd Source Select);**Chapter 4, pg 4–39; P3.31 (2nd Source of Operation Command);****Chapter 4, pg 4–42; P4.13 (2nd Source of Frequency Command):**

Add important note, example, and warning concerning 1st/2nd Source Selection:



NOTE: If using 1st/2nd Source Selection, the GS3 drive will continue to operate in the last commanded state when switched from 1st to 2nd source, or from 2nd to 1st source. If stopped when switched, the GS3 drive will remain stopped. If running when switched, the GS3 drive will continue to run.
 The feature 1st/2nd Source Select is available in the GS3 drive by configuring one of the digital inputs (DI3 thru DI11), to a value of 19 or 20. If used, 1st/2nd Source Select affects the following parameters: P3.00 - Source of Operation Command, P3.31 - 2nd Source of Operation Command, P4.00 - Source of Frequency Command, P4.13 - 2nd Source of Frequency Command.

EXAMPLE: Digital input DI11 is configured for 1st/2nd Source Select N.O. (P3.10 = 19).

The 1st source of operation is the digital keypad (P3.00 = 0) and the 2nd source of operation is the external control terminals DI1, DI2, DI3, (P3.31 = 01 or 02). If the GS3 drive is running from the digital keypad (1st source) and is switched to the external control terminals DI1, DI2, DI3, (2nd source), the GS3 drive will continue to run, even if the external control terminals DI1, DI2, DI3 are off (drive stop). Following a transition of the 2nd source of operation external terminals DI1, DI2, DI3, the GS3 drive will then operate based on that control state.



WARNING: IT IS ADVISABLE TO INSURE THAT THE GS3 DRIVE IS STOPPED BEFORE SWITCHING FROM ONE OPERATION COMMAND SOURCE TO THE OTHER.

Chapter 4, pg 4–54:

Add a new Analog Parameter Example #9 for inverting analog input signals as shown:

EXAMPLE 9: INVERT THE ANALOG INPUT SIGNAL

This example illustrates how to invert the analog input signal so that the drive is at 0Hz output at full analog signal, and full output at 0 analog signal.

Parameter Settings

- P4.01: 02 [Negative Input Offset Polarity]
- P4.02: 100.0 [100.0% Analog Input Offset]
- P4.03: 100.0 [100.0% Analog Input Gain]
- P4.04: 01 (default) [Forward Motion Only]



This change might require two of the motor leads to be swapped at the T terminals of the drive.

Chapter 4, pgs 4–74; P9.04:

Revise P9.04 explanation as follows:

P9.04 Time Out Detection

Settings: 00: Disable
 01: Enable

Default Setting: 00

When this parameter is set to 01, the communications Time Out Detection is Enabled. If a delay in communications for more than the Time Out Duration (P9.05) is detected, the action selected by the Transmission Fault Treatment (P9.03) will be used. The separation between characters within a message cannot exceed 500ms.

Chapter 5, pg 5-12:

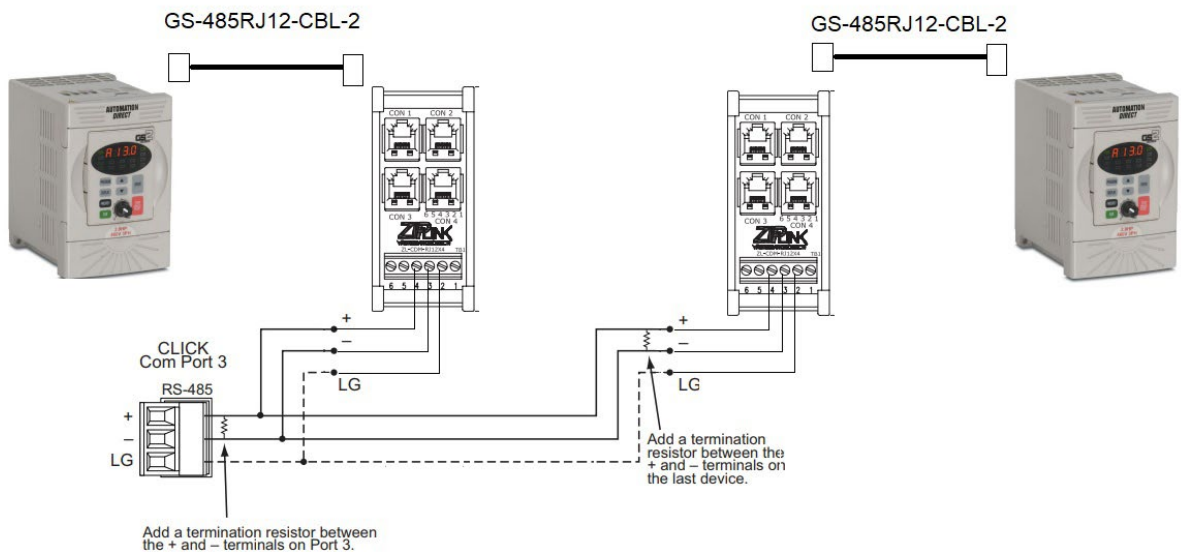
Revise Status Monitor 2 Memory Address table as shown:

Status Monitor 2 - Memory Address h2101		
Address Bit(s)	Bit(s) Value Binary (Decimal)	AC Drive Status
0 and 1	00 (0)	(Stop state): driver Stop command state; drive has <u>no</u> output.
	01 (1)	(Stopping): driver Stop command state and Frequency deceleration (by Stop methods set Ramp stop mode); drive has an output.
	10 (2)	(Standby state): driver Run command state and frequency command is 0 Hz; drive has <u>no</u> output.
	11 (3)	(Running): driver Run command state and the frequency command is not zero; drive has an output.
2	1 (4)	JOG active
3 and 4	00 (0)	Rotational direction forward (FWD)
	01 (8)	REV to FWD transition
	10 (16)	FWD to REV transition
	11 (24)	Rotational direction reverse (REV)
5 ~ 7	N/A	Reserved
8	1 (256)	Source of frequency determined by serial comm interface (P4.00 = 5)
9	1 (512)	Source of frequency determined by AI terminal (P4.00 = 2, 3, 4 or 6)
10	1 (1024)	Source of operation determined by serial comm interface (P3.00 = 3 or 4)
11	1 (2048)	Parameters have been locked (P9.07 = 1)
12	N/A	Copy command enable

Chapter 5, pg 5-15:

Add CLICK PLC Communication Diagram as Shown:

CLICK C0-02: RS-485 CONNECTION WIRING



Appendix A, pg A-38:

Revise Fuse Kit Specifications table as shown:

Fuse Kit Specifications for GS3 AC Drives												
Part Number	Drive Model / Phase	Fuse Block Type	Fuse Type	Fuse Rating	Fuse Block Dimensions	Wire Connector Torque (lb-in)	Fuse Bolt Torque (lb-in)	Wire Range	Replacement Fuses			
GS-21P0-FKIT-1P*	GS3-21P0 / 1	2-pole		300V @ 30A	Figure 1	20	spring clips	Al/Cu #2-14	GS-21P0-FUSE-1P			
GS-22P0-FKIT-1P*	GS3-22P0 / 1			300V @ 45A		45			GS-22P0-FUSE-1P			
GS-23P0-FKIT-1P*	GS3-23P0 / 1			300V @ 60A		45			GS-23P0-FUSE-1P			
GS-21P0-FKIT-3P	GS3-21P0 / 3	3-pole	A3T	300V @ 20A	Figure 2	20	spring clips	Al/Cu #2-14	GS-21P0-FUSE-3P			
GS-22P0-FKIT-3P	GS3-22P0 / 3			300V @ 25A		20			GS-22P0-FUSE-3P			
GS-23P0-FKIT-3P	GS3-23P0 / 3			300V @ 40A		45			GS-23P0-FUSE-3P			
GS-25P0-FKIT	GS3-25P0 / 3			300V @ 60A		45			GS-25P0-FUSE			
GS-27P5-FKIT	GS3-27P5 / 3			300V @ 100A	Figure 3	50	72	Al/Cu 2/0-#6	GS-27P5-FUSE			
GS-2010-FKIT**	GS3-2010 / 3			300V @ 125A					GS-2010-FUSE			
GS-2015-FKIT**	GS3-2015 / 3			300V @ 175A					GS-2015-FUSE			
GS-2020-FKIT	GS3-2020 / 3			300V @ 250A	Figure 5	300V @ 300A	600	228	GS-2020-FUSE			
GS-2025-FKIT	GS3-2025 / 3			300V @ 350A					600	228	GS-2025-FUSE	
GS-2030-FKIT	GS3-2030 / 3			300V @ 450A					600	228	GS-2030-FUSE	
GS-2040-FKIT***	GS3-2040 / 3			300V @ 500A	Figure 6	300V @ 500A	600	360	GS-2040-FUSE			
GS-2050-FKIT***	GS3-2050 / 3			300V @ 500A					600	360	GS-2050-FUSE	
GS-41P0-FKIT	GS3-41P0 / 3	3-pole	A6T	600V @ 10A	Figure 7	20	spring clips	Al/Cu #2-14	GS-41P0-FUSE			
GS-42P0-FKIT	GS3-42P0 / 3			600V @ 15A		20			GS-42P0-FUSE			
GS-43P0-FKIT	GS3-43P0 / 3			600V @ 20A		20			GS-43P0-FUSE			
GS-45P0-FKIT	GS3-45P0 / 3			600V @ 30A		20			GS-45P0-FUSE			
GS-47P5-FKIT	GS3-47P5 / 3			600V @ 50A	Figure 8	45	GS-47P5-FUSE					
GS-4010-FKIT	GS3-4010 / 3			600V @ 70A	Figure 9	600V @ 90A	120	72	Cu 2/0-#12	GS-4010-FUSE		
GS-4015-FKIT	GS3-4015 / 3			600V @ 90A						120	72	GS-4015-FUSE
GS-4020-FKIT	GS3-4020 / 3			600V @ 125A	Figure 10	600V @ 150A	275	132	Al/Cu 2/0-#6	GS-4020-FUSE		
GS-4025-FKIT	GS3-4025 / 3			600V @ 175A						275	132	GS-4025-FUSE
GS-4030-FKIT	GS3-4030 / 3			600V @ 225A						600	228	GS-4030-FUSE
GS-4040-FKIT***	GS3-4040 / 3			600V @ 250A	Figure 11	600V @ 350A	600	228	Al/Cu 2/0-#6	GS-4040-FUSE		
GS-4050-FKIT***	GS3-4050 / 3			600V @ 400A						600	228	GS-4050-FUSE
GS-4060-FKIT***	GS3-4060 / 3	600V @ 400A	600	228						GS-4060-FUSE		
GS-4075-FKIT***	GS3-4075 / 3	600V @ 600A	600	360						GS-4075-FUSE		
GS-4100-FKIT***	GS3-4100 / 3	600V @ 600A	Figure 12	600	360	GS-4100-FUSE						

Short Circuit Current Rating (SCCR) = 200 kA

* Single-phase fuse kits contain a 2-pole fuseblock. Per NEC 240.22, fusing is correct only for the hot leg of a source; not for an intentionally grounded source conductor. The hot leg of a grounded 115VAC supply is the only supply line that should be fused.

** GS-2010-FKIT and GS-2015-FKIT are no longer available. Please use GS-27P5-FKIT instead.

*** Three units required.