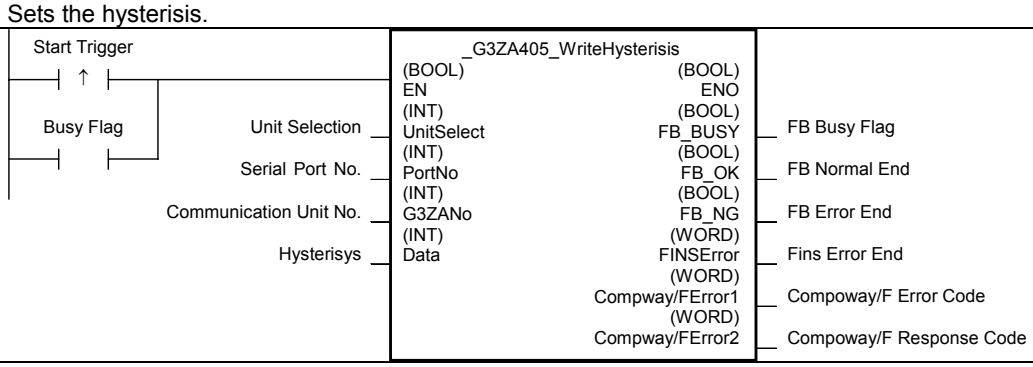
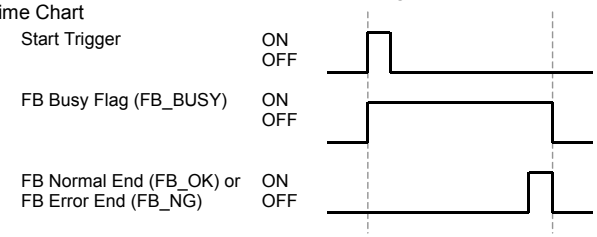
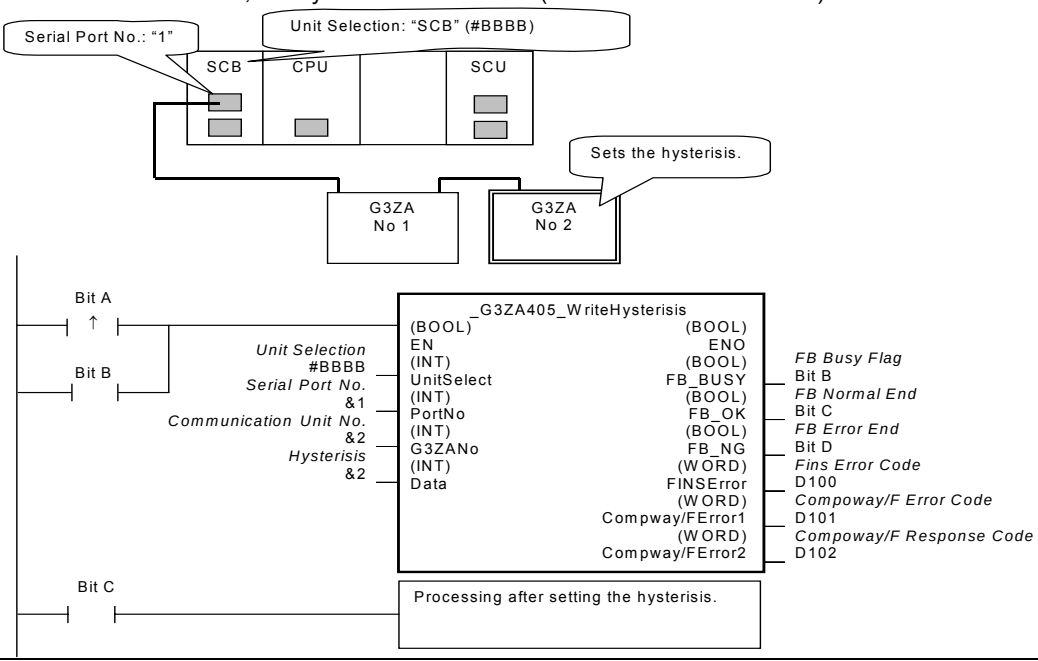
G3ZA 405	Write Hysterisis _G3ZA405_WriteHysterisis

Basic Function	Sets the hysterisis.	
Symbol		
File name	Lib\FBL\omronlib\PowerController\G3ZA\Serial_G3ZA405_WriteHysterisis10.cxf	
Applicable models	Power Controller	G3ZA
	CPU Unit	CS1*-CPU**H Unit version 3.0 or higher CJ1*-CPU**H Unit version 3.0 or higher CJ1M-CPU** Unit version 3.0 or higher CP1H CP1L (except 10 points CPU)
	Serial Communications Units/Boards	CS1W-SCU21-V1, CJ1W-SCU21-V1, CJ1W-SCU41-V1 Unit Version 1.2 or higher CS1W-SCB21-V1 and CS1W-SCB41-V1 Unit Version 1.2 or higher
	CX-Programmer	Version 5.0 or higher
Usage condition	External Connection •1:N connection is possible. Communications Setting The communications setting of a serial port (Serial Gateway) must be identical to that of the Power Controller. •The communications setting of the specified serial port can be matched to the default Power Controller setting (the factory shipment value) by using the *Set Communication Port* (_G3ZA600_SetComm) FB, and also to the settings other than the default setting by using the *Set Serial Gateway Mode* (_SCx604_SetPortGATEWAY) FB. CPU Unit Setting PLC Setup: *Shared Settings for Communications Instructions in FBs* •Communications Instruction Response Timeout (default: 2 s): 5 s or more is recommended. •The number of retries (default: 0). Shared Resource •A communication port (an internal logical port)	
Descriptions	When a Start Trigger is turned ON, the hysterisis is set. When an error occurs, refer to 1) *FINS Error Code*, 2) *Compoway/F Error Code* and 3) *Compoway/F Response Code* in this order. When ended normally, both the error code output and response code output become #0000.	
Precautions	•This FB is processed over multiple cycles. The *FB_BUSY* output variable can be used to check whether the FB is in process. •FB_OK or FB_NG will be turned ON only for one cycle upon a completion of processing. Use these flags to detect a completion of FB processing. Time Chart 	
EN input condition	Connect EN to the OR between the *Start Trigger* 's DIFU (differentiate up) and the *FB_BUSY* output from the FB. See the diagram above.	
Restrictions Input variable	Always use DIFU (differentiate up) (↑) for EN inputs.	
Output variable	•This FB is processed over multiple cycles. Always connect the OR including the *FB_BUSY* output variable to the EN input variable so that the processing can be completed. (See *Symbol*). •Do not turn the FB_BUSY output variable ON or OFF except for FBs.	

Usages	The Power Controller is connected to Serial Port 1 on a Serial Communications Board (SCB) by 1:N connection. When Bit A is turned ON, the hysterisis of the G3ZA (Communication unit No.2) Power Controller is set. 
Related manuals	**G3ZA** *G3ZA Multi-channel Power Controller User's Manual* (Z200-E1) Section 3.Communications（CompoWay/F） 3-1.Communication Settings 3-6.Operation Command **FINS Error code** CS/CJ Series Communications Commands Reference Manual (W342-E1) 5-1-3 End Codes

Variable Tables

Input Variables

Name	Variable Name	Data Type	Default	Scope	Descriptions
EN	EN	BOOL			1(ON): A FB is started. 0(OFF): A FB is not started.
Unit selection	UnitSelect	INT	&0	At right.	Specify the Unit and the serial port.
Serial Port No.	PortNo	INT	&1	&1 to &2	Only serial port 2 of CP1H/CP1L M-type CPU unit is possible to use this FB. ■ Connected to CPU Unit Unit selection: #FFFF Serial port No.: Not accessed. (CP1H/CP1L-M: Serial Port2, CP1L-L14/20: Serial Port1) ■ Connected to Serial Communication Board(SCB) Unit selection: #BBBB Serial port No.: &1: Serial Port 1, &2: Serial Port 2 ■ Connected to Serial Communication Unit(SCU) Unit selection: SCU Unit No. (&0 to &15) Serial port No.: &1: Serial Port 1, &2: Serial Port 2
Communication Unit No.	G3ZANo	INT	&0	&0 to &31	Specifies the communication unit No. of G3ZA.
Hysterisis	Data	INT	&1	&1 to &10	Specifies the Hysterisis. &1 to &10 Sets it in increments of 1A

Output Variable

Name	Variable Name	Data Type	Scope	Descriptions
ENO (Omissionable)	ENO	BOOL		1(ON): A FB has operated normally. 0(OFF): A FB has not started. / A FB ended in error.
FB Busy Flag	FB_BUSY	BOOL		Turned off automatically after a completion of processing.
FB Normal End	FB_OK	BOOL		Turned ON only for 1 cycle when processing ends normally.
FB Error End	FB_NG	BOOL		Turned ON only for 1 cycle when processing ends in error.
FINS Error Code	FINS_ErrorCode	WORD		Outputs the Fins Error Code when a FB_NG flag is ON. It is #0000 when ended normally. For details of the codes, refer to the *CS/CJ Series Communications Commands Reference Manual (W342-E1)*.
Compoway/F Error Code	CompowayF_ErrorCode1	WORD		Outputs the Compoway/F Error Code when a FB_NG flag is ON. Mainly the error statuses on physical communication lines are output as the Compoway/F Error Code. It is #0000 when ended normally. For details of the codes, refer to the descriptions below.
Compoway/F Response Code	CompowayF_ErrorCode2	WORD		Outputs the Compoway/F Response Code when a FB_NG flag is ON. Mainly the operation error status of the Power Controller is output as the Compoway/F Response Code. It is #0000 when ended normally. For details of the codes, refer to the descriptions below.

Compoway/F Error Code

Code	Contents	Descriptions
#0000	Normal End	The command processing ended normally.
#000F	FINS Command Error	Specifying a FINS command cannot be executed.
#0010	Parity Error	The sum of bits whose received data is “1” does not accord with the setting of a “Communication Parity”.
#0011	Flaming Error	The stop bit is “0”.
#0012	Overrun Error	The next data was received when it was full with the already received data.
#0013	BCC Error	The received BCC and the calculated BCC are different.
#0018	Frame Length Error	The length of the received flame exceeds the specified number of bytes.

Compoway/F Response Code

Code	Contents	Descriptions
#0000	Normal End	The processing ended normally.
#2203	Operation Error	An error occurred in the G3ZA nonvolatile memory.

Version History

Version	Date	Contents
1.00	2006.08	Original Production

Attention

This document describes the functions of Function Blocks.
The usage restrictions for units or components and its combinations are not described here. We would like you to make sure of reading the *User’s Manual* before actually using the products.