

Chapter 4. FUNCTION BLOCK

This chapter shows function block for the D/A conversion module on the GMWIN.

A kind of function block is as follows

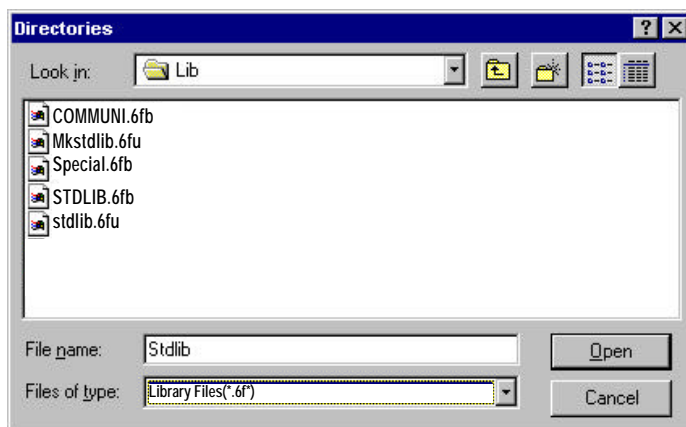
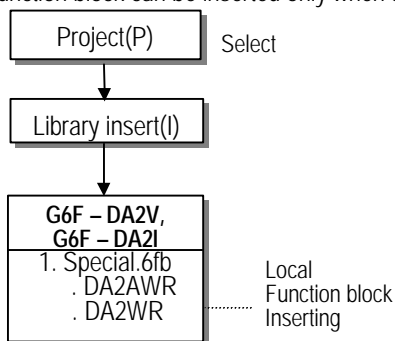
NO.	G6F-DA2V, G6F-DA2I	Function
1	DA2AWR	Writing D/A conversion (Array type)
2	DA2WR	Writing D/A conversion (Single type)

REMARK
Function block of the G6F-DA2V and G6F-DA2I are same

4.1 Insertion of the Function Block for D/A Conversion Module on the GMWIN

A function block can be inserted during the execution of the GMWIN according to the following procedure..


A function block can be inserted only when a project opens.



4.2 Function Blocks for Local

4.2.1 Module Write_Array Type (G6F-DA2V / G6F-DA2I : DA2AWR)

Module write function block of the Array type is a program for the use in performing for every channel in block and setting a digital value to be converted into a D/A conversion.


Function Block	I/O	Variable	Data Type	Descriptions
G6F-DA2V G6F-DA2I 	input	REQ	BOOL	Function Block Execution Request Area -The execution of function block initialization is requested in this area. -If the status connected with this area is satisfied on the program execution and 0 is changed to 1, function block for the module is executed.
		BASE	USINT	Base Location Number Area -The base No. on which D/A conversion module is mounted is written on this area. -Setting range : 0 to 1
		SLOT	USINT	Slot Location Number Area -The slot No. on which D/A conversion module is mounted is written on this area. -Setting range: 0 to 7
		DATA	INT[4] *Note1	Input Data Type Specification Area -Input digital data type for each channel is specified in this area. -Setting range:-48 ~ 4047
	output	DONE	BOOL	Function Block Execution Complete Area - When function block has been completed with no error, 1 is written and until next execution, 1 is continuing. When error occurs, 0 is written and operation come to stop.
		STAT	USINT	Error Code Display Area - When error occurs during function block processing, the error code number is written. - For error code, refer to Manual 4.3.

REMARK

* Note 1: USINT[4] of data type means that the number of element is 4, and also this means the whole number of channels and channel number.

4.2.2 Module Write_Single Type(G6F-DA2V / G6F-DA2I : DA4WR)

Module write function block of the Single type is a program for the use in performing for a channel of D/A conversion module and setting a digital value to be converted into a D/A conversion.

Function block	I/O	Variable	Data type	Descriptions
G6F-DA2V G6F-DA2I 	input	REQ	BOOL	Function Block Execution Request Area -The execution of function block is requested in this area. - If the status connected with this area is satisfied on the program execution and 0 is changed to 1, function block for the module is executed.
		BASE	USINT	Base Location Number Area - The base No. on which D/A conversion module is mounted is written on this area. - Setting range : 0 to 1
		SLOT	USINT	Slot Location Number Area - The slot No. on which D/A conversion module is mounted is written on this area. - Setting range: 0 to 7
		CH	USINT	Available Channel Specification Area - Available channels are specified in this area. -Range:0; 3
		DATA	INT	Input Data Type Specification Area -Input digital data type for each channel is specified in this area. -Setting range: -48 ~ 4047
	output	DONE	BOOL	Function Block Execution Complete Area - When function block has been completed with no error, 1 is written and until next execution, 1 is continuing. When error occurs, 0 is written and operation come to stop.
		STAT	USINT	Error Code Display Area - When error occurs during function block processing, the error code number is written. - For error code, refer to Manual 4.3.

4.3 Errors on Function Block

This shows the errors on the output variable "STAT" of variables and the resolutions in accordance with them.

STAT No.	Descriptions	Function Block		Resolutions
		Array type	Single type	
0	Operating with no fault	0	0	-
1	The base location number is exceeding the proper setting range	0	0	Correct the number in accordance with the proper range (See Manual 4.2)
2	H/W error of the base	0	0	Contact the service station.
3	The slot location number is exceeding the proper setting range	0	0	Set the right number to the slot mounting the D/A conversion module
4	The D/A conversion module on the slot is empty	0	0	Mount the D/A conversion module to the specified slot
5	The module loaded isn't the D/A module	0	0	Mount the D/A conversion module to the specified slot
6	The channel number is exceeding the proper range	-	0	Specify the available channel correctly
7	H/W error of the D/A conversion module	0	0	Contact the service station.
8	The D/A conversion module's shared memory error	0	0	Contact the service station.