General Specifications

GS 33J60E51-01EN

Model EC402 ESB Bus Coupler Module (for N-IO/FIO, 2-Port)

[Release 6]

■ GENERAL

The ESB Bus Coupler Module is a communication module to connect the Field Control Unit and the Node Unit for ESB Bus via the ESB bus.

This module can be installed in the Field Control Unit for FIO (AFV30S, AFV30D, AFV40S, AFV40D, A2FV50S, A2FV50D, A2FV70S, A2FV70D).

By installing two modules in the Field Control Unit for FIO, dual-redundant ESB bus can be configured. EC402 has two ESB bus connector ports on the front of the module and accommodates a larger number of connected nodes than EC401, so it can offer a longer transmission distance.

STANDARD SPECIFICATIONS

 Function:
 ESB bus master interface function

 Number of connectable nodes (*1):
 Upper side : Max. 9 units, Lower side : Max 9 units, Total: Max. 13 units.

 Transmission speed:
 128 Mbps (I/O module data transmission)

 Transmission distance:
 Upper side: Max. 10 m, Lower side: Max. 10 m, Total: Max. 20 m

 Current consumption:
 0.5 A

 Weight:
 Approx. 0.24 kg

 *1:
 This varies depending on the FCS database.

If ESB bus is non- redundant, the ESB Bus Coupler Module needs to be installed in the 7th slot of AFV30S, AFV30D, AFV40S, or AFV40D, A2FV50S, A2FV50D, A2FV70S, A2FV70D, and slot 8th must be covered by a dummy module. And when ESB bus is dual-redundant, the modules need to be installed in both the 7th and 8th slots.

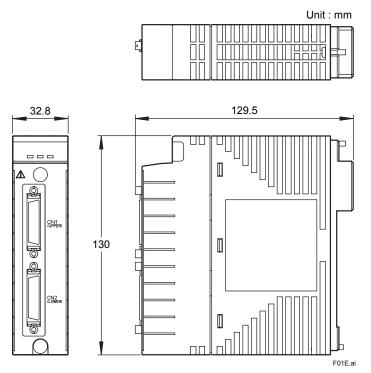
■ REQUIREMENTS FOR USING SEM (Sequence of Events Manager)

For using SEM, the hardware requires some conditions.

For details, refer to the GS "SEM Sequence of Events Manager" (GS 33J30D10-01EN).



EXTERNAL DIMENSION



Nominal Tolerances :

When the reference dimension is over 0.5 mm and equal or less than 120 mm, its nominal tolerance is \pm 0.8 mm, while its combination of nominal tolerance is \pm 1.5 mm.

When the reference dimension is over 120 mm, its nominal tolerance is in accordance with JEM 1459.

MODEL AND SUFFIX CODES

		Description
Model	EC402	ESB Bus Coupler Module (for N-IO/FIO, 2-Port)
Suffix Codes	-5	Standard type with no explosion protection
	-E	Standard type with explosion protection
	0	Basic type
	1	With ISA Standard G3 option

■ APPLICABLE STANDARDS

Refer to the GS "Integrated Production Control System CENTUM VP System Overview" (GS 33J01A10-01EN).

ORDERING INFORMATION

Specify model and suffix codes.

For selecting the right products for explosion protection, please refer to TI 33Q01J30-01E without fail.

TRADEMARK

Subject to change without notice.

• CENTUM is a registered trademark of Yokogawa Electric Corporation.

All Rights Reserved. Copyright © 2015, Yokogawa Electric Corporation

• Other company and product names appearing in this document are trademarks or registered trademarks of their respective holders.