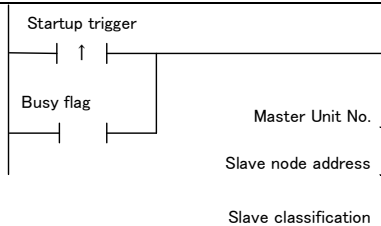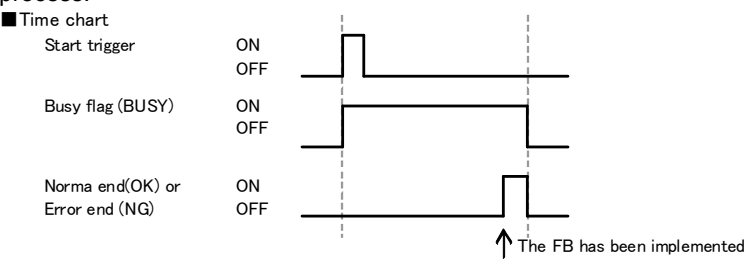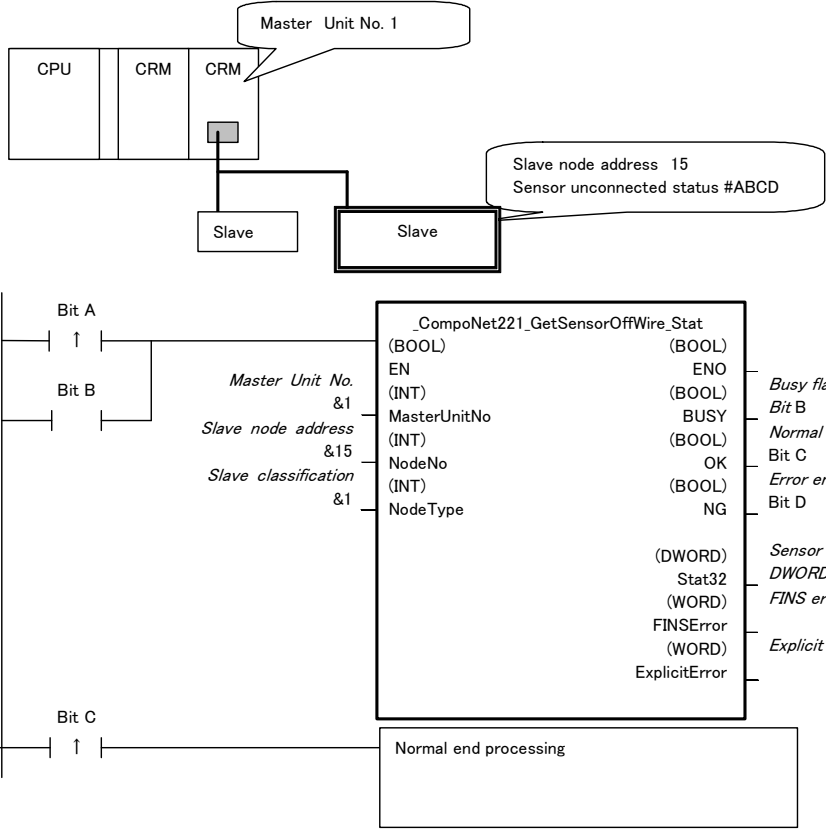| CompoNet 221	Read Sensor OFF Wire Status: _CompoNet221_GetSensorOffWire_Stat

Basic function	Reads the Sensor unconnection status from Slaves on CompoNet.
Symbol	
File name	Lib\FBL\omronlib\RemoteIO\CompoNet_CompoNet221_GetSensorOffWire_Stat10.cxf

Applicable models	Applicable Master units	CS1W-CRM21/CJ1W-CRM21
	Applicable Slave units	·Models with 8 input points: CRT1-ID08TAH(-1)/CRT1-ID8SLH(-1) ·Models with 16 MIX points: CRT1-MD16TAH(-1)/CRT1-MD16SH(-1)/CRT1-MD16SLH(-1) ·Models with 16 input points: CRT1-ID16TAH(-1)/CRT1-ID16SH(-1)/CRT1-ID16SLH(-1) ·Models with 32 MIX points: CRT1-MD32SH(-1)/CRT1-MD32SLH(-1) ·Models with 32 input points: CRT1-ID32SH(-1)/CRT1-ID32SLH(-1)
	CPU	CS1*-CPU**H in Unit version 3.0 or later CJ1*-CPU**H in Unit version 3.0 or later CJ1M-CPU** in Unit version 3.0 or later CP1H
	CX-Programmer	Version 5.0 or later

Used Language	Ladder logic language

Conditions for usage	- CPU Unit settings
	   PC setup: Shared Settings for Communication Instructions in FBs
	     ・CompoNet response timeout time (default in 2s): recommendable in 10s
	     ・Number of retries (default in 0)
	 - Shared resources
	     ・Communication ports (internal logic ports)
	 - Other
	   Communication must be within one network and cannot cross over to another network.

Function description	It gets the sensor unconnection status on a CompoNet Slave, which is specified by the Master Unit No., the Slave node address and the Slave classification. Refer to the FINS error code and the Explicit message error code when having an error. Both error code outputs at a normal end are #00000.
FB Definition Type	Processing over multiple cycles After the start-up, the FB is processed over multiple cycles. In order to save the internal state, an identical instance cannot be used in multiple locations at the same time.

FB precautions	The FB is processed over multiple cycles. The output variable BUSY is to check whether the FB is being processed or not. After the process completes, OK or NG will be ON for just one cycle. Use the flag to detect the end of FB process. ■Time chart
EN input condition	Connect EN to the OR between the startup of the Start Trigger and the BUSY output from FB.
Restrictions Input variables	- Be sure to use an upwardly differentiated condition (↑) for EN inputs. - If the input variables are out of the specified range, the ENO flag will be off. The FB is not processed.
Output variables	- The FB requires to be processed over multiple cycles. In order to ensure the FB is processed to the final cycle, connect the output variable BUSY to the OR circuit: the input condition to the input variable EN. See the section of Symbol. - Do not make the output variable BUSY flag ON or OFF outside the FB.
Application examples	Turning ON the bit A will read the Sensor unconnected status of the Slave, which is specified by the node address 15. As a result, #0000ABCD is stored in D0-D1.

Related manuals	- Explicit massage error code
	  User's Manual for CompoNet CRT1 series (Doc. # SBCD-339)
	    Appendix 1-1 Basic format of Explicit message "Error code list"
	- FINS error code
	  Communication Command Reference (Doc. # SBCA-304)
	    5-1. FINS command list "Terminal code list"

Variable Tables

Input variables

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL	0		1(ON)：To start FB. 0(OFF)：Not to start FB.
Master Unit No.	MasterUnitNo	INT	&0	&0 to &95 #0 to #5F	To specify the unit number of the CompoNet Master unit.
Slave node address	NodeNo	INT	&0	&0 to &63	To specify the Slave node address.
Slave classification	NodeType	INT	&1	&1 or &3	Slave classification 1: IN Word Slave 3: MIX Word Slave

Output variables

Name	Variable name	Data type	Range	Description
ENO (May be omitted)	ENO	BOOL		1(ON)：FB functions normally. 0(OFF)：FB does not start up or has an error end.
Busy flag	BUSY	BOOL		To turn off automatically after the process completes.
Normal end	OK	BOOL		Cycle goes ON for once after the normal end.
Error end	NG	BOOL		Cycle goes ON for once after the error end.
Sensor unconnection status DWORD bit (May be omitted)	Stat32	DWORD	#00000000 to #FFFFFFFF	To output the sensor unconnection status. <<Data description>> ·In a 8-input point unit, 　Bit0 to 7: unconnected status of terminal 0 to 7. 　Bit8 to 31: Reserved(OFF) ·In a 16-input point unit, 　Bit0 to 15: unconnected status of terminal 0 to 15. 　Bit16 to 31: Reserved(OFF) ·In a 32-input point unit, 　Bit0 to 31: unconnected status of terminal 0 to 31. 　　0(OFF): Normal 　　1(ON): Unconnected
FINS error code (May be omitted)	FINSError	WORD	#0000 to #FFFF	To output the FINS error code. The output will be #0000 in a normal end. Refer to the **Related manuals** for details of the error codes.
Explicit massage error code (May be omitted)	ExplicitError	WORD	#0000 to #FFFF	To output the Explicit message error code. The output will be #0000 in a normal end. Refer to the **Related manuals** for the details of the error codes.

■ Version history

Version number	Date	Description
1.00	2008.05.	Original production