



Model CC-Link IE Field Network Basic Compatible

Title CC-Link IE Field Network Basic
 Slave Station Conformance Test Specifications

Management number: BAP-C0401ENG-045

Revisions

Sub-number	Revision description	Issued month/year
*	First edition	7/2016
A	(1) Support to protocol version 2 (2) Correction of mistakes	6/2017
B	• Description of how to test the device supporting a line topology	11/2020

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Overview

This specification document contains information about test items for the connectivity (conformance) of the CC-Link IE Field Network Basic-compatible slave station.

Conformance tests are conducted by device manufacturers and results of the tests are checked by CC-Link Partner Association (CLPA). Test target modules need to pass (PASS) all the conformance tests, which are described in this document, to be evaluated as connectable modules to the CC-Link IE Field Network Basic.

Fill in the result columns for each test item: When a module passes the test, the tester needs to fill in "PASS" to the column, and if a module fails the test, the tester needs to fill in "FAIL" to the column. Enter "-" in the column when there is no corresponding function. Also, measurement value etc. should be entered, if necessary.

(1) Test configuration and precautions

- If not otherwise specified, the test should be conducted in the basic test configuration of Figure 1.
- If not otherwise specified, the personal computer where the CC-Link IE Field Network Basic conformance test tool (master station) is installed should be used. Also, as a slave station other than the test target station, the personal computer where the CC-Link IE Field Network Basic conformance test tool (slave station) is installed should be used.

(Up to two personal computers are required in this test.)

- The test target station^{*1} supporting a line topology should conduct the aging test by using all the ports at the same time as shown in Figure 2.
- The same network address should be used for both the master station and slave station.

^{*1}: The test target station has two or more Ethernet connector ports and supports the repeat function among the ports (switching function)

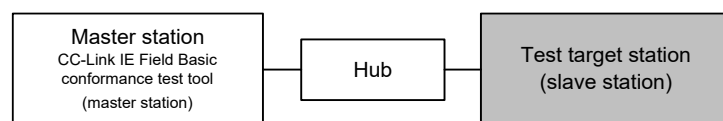


Figure 1 Basic test configuration

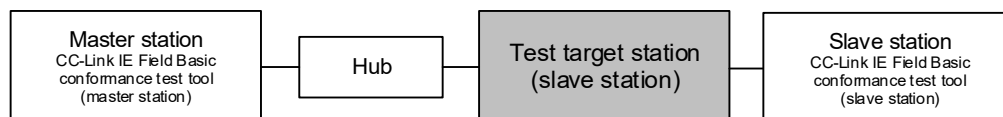


Figure 2 Aging test configuration for the test target station supporting a line topology

(2) Test item list

The test item list is shown in Table 1.

Table 1 Test item list

○: Executed, △: Results are checked

Classification	Test item	Option/Mandatory	Executed/ Not executed	
			Manufacturer	CLPA
1. Software test	1. 1. Host station information			
	(1) Confirmation of host station information stored in the host station	mandatory	○	△
	(2) Confirmation of slave station notification information	mandatory	○	△
	1. 2. Basic functions			
	(1) Cyclic communications (Maximum number of occupied stations)	mandatory	○	△
	(2) Cyclic communications (Minimum number of occupied stations)	mandatory	○	△
	1. 3. Control			
	(1) Cyclic start/stop indicated by master station	mandatory	○	△
	(2) Cyclic start/stop to host station	option	○	△
	(3) Host station control according to the operating status of the master station	mandatory	○	△
	1. 4. Error processing			
	(1) Master station duplication	mandatory	○	△
	(2) Master station disconnection	mandatory	○	△
	(3) Slave station ID duplication	mandatory	○	△
	(4) Specification of the number of occupied stations not supported by the test target station	option	○	△
	1. 5. Performance measurement			
	(1) Reference response time measurement	mandatory	○	△
	1. 6. Access to device information			
	(1) Detecting a connected device	mandatory	○	△
	(2) Setting the IP address of the connected device	option	○	△
2. Profile description (CSP+) confirmation	2. 1. Confirmation of formats	mandatory	○	△
	2. 2. Confirmation of indispensable items	mandatory	○	△
	2. 3. Confirmation with an actual device connected	mandatory	○	△
3. Aging test	3. 1. Aging test	mandatory	○	△

1. Software test

1.1. Host station information

Classification	1. Software test													
Test item	1. 1. Host station information (1) Confirmation of host station information stored in the host station													
Test method	Confirm station information of the test target station.													
Judgment criteria	Host station information of the test target station <table border="1"> <thead> <tr> <th>Name</th><th>Monitor value</th><th>Data (*1)</th></tr> </thead> <tbody> <tr> <td>Vendor code</td><td>4-digit (hexadecimal) value provided by CLPA</td><td>[4338]</td></tr> <tr> <td>Model name code</td><td>Optional However, the code should be uniquely managed in the same vendor code.</td><td>[] 37C5CD31</td></tr> <tr> <td>Device version</td><td>Optional</td><td>[2]</td></tr> </tbody> </table>		Name	Monitor value	Data (*1)	Vendor code	4-digit (hexadecimal) value provided by CLPA	[4338]	Model name code	Optional However, the code should be uniquely managed in the same vendor code.	[] 37C5CD31	Device version	Optional	[2]
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Vendor code	4-digit (hexadecimal) value provided by CLPA	[4338]												
Model name code	Optional However, the code should be uniquely managed in the same vendor code.	[] 37C5CD31												
Device version	Optional	[2]												
Remarks	*1 Manufacturers need to provide the host station information of the test target station to CLPA.													
Result	Manufacturer (required)	CLPA (confirmation)												
	PASS													
CC-Link Partner Association														

Classification	1. Software test																																		
Test item	1. 1. Host station information (2) Confirmation of slave station notification information																																		
Test method	Confirm slave station notification information of the test target station with the CC-Link IEF Basic conformance test tool. Configuration needs to follow the basic test configuration.																																		
Judgment criteria	<p>Check the values of the following parameters acquired with the conformance test tool.</p> <table border="1"> <thead> <tr> <th>Name</th><th>Monitor value</th><th>Data</th><th>Result (*1)</th></tr> </thead> <tbody> <tr> <td>Protocol version</td><td>Version of the protocol that the test target station has implemented</td><td>[2]</td><td>PASS</td></tr> <tr> <td>Vendor code</td><td>4-digit (hexadecimal) value provided by CLPA</td><td>[4338]</td><td>PASS</td></tr> <tr> <td>Model name code</td><td>Optional However, the code should be uniquely managed in the same vendor code.</td><td>[] 37C5CD31</td><td>PASS</td></tr> <tr> <td>Device version</td><td>Optional</td><td>[2]</td><td>PASS</td></tr> <tr> <td>Host station module information</td><td>Operating status of the application</td><td>[0]</td><td>PASS</td></tr> <tr> <td>Error code</td><td>Error code of the slave station</td><td>[0]</td><td>PASS</td></tr> <tr> <td>Host station management information</td><td>Optional</td><td>[0]</td><td>PASS</td></tr> </tbody> </table> <p>*1: When the process is completed properly, enter ✓ in the corresponding field.</p>			Name	Monitor value	Data	Result (*1)	Protocol version	Version of the protocol that the test target station has implemented	[2]	PASS	Vendor code	4-digit (hexadecimal) value provided by CLPA	[4338]	PASS	Model name code	Optional However, the code should be uniquely managed in the same vendor code.	[] 37C5CD31	PASS	Device version	Optional	[2]	PASS	Host station module information	Operating status of the application	[0]	PASS	Error code	Error code of the slave station	[0]	PASS	Host station management information	Optional	[0]	PASS
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Result	Manufacturer (required) PASS	CLPA (confirmation) 																																	
CC-Link Partner Association																																			

1.2. Basic functions

Classification	1. Software test																							
Test item	1. 2. Basic function (1) Cyclic communications (Maximum number of occupied stations)																							
Test method	<p>Specify the maximum number of occupied stations with the test target station to execute cyclic communications.</p> <p>Configuration needs to follow the basic test configuration.</p> <p>Parameter setting</p> <table border="1"> <tr> <td></td><td>Number of occupied stations</td></tr> <tr> <td>Test target station</td><td>Maximum number of test target stations 4</td></tr> </table>			Number of occupied stations	Test target station	Maximum number of test target stations 4																		
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Test target station	Maximum number of test target stations 4																							
Judgment criteria	<p>Confirmation of the number of occupied stations used for the test</p> <p>Check the following parameter used in the test.</p> <table border="1"> <tr> <td>Name</td><td>Value</td></tr> <tr> <td>Number of occupied stations</td><td>[4]</td></tr> </table> <p>Confirm the following using the conformance test tool.</p> <p>Confirmation of the test target station sending side</p> <p>The conformance test tool can properly receive the values set in the test target station.</p> <table border="1"> <tr> <th>No.</th><th>Item</th><th>Result (When the following items are satisfied, enter ✓ in the blanks.)</th></tr> <tr> <td>(1)</td><td>RWr</td><td>✓</td></tr> <tr> <td>(2)</td><td>RX</td><td>✓</td></tr> </table> <p>Confirmation of the test target station receiving side</p> <p>The test target station can properly receive the values set in the conformance test tool.</p> <table border="1"> <tr> <th>No.</th><th>Item</th><th>Result (When the following items are satisfied, enter ✓ in the blanks.)</th></tr> <tr> <td>(1)</td><td>RWw</td><td>✓</td></tr> <tr> <td>(2)</td><td>RY</td><td>✓</td></tr> </table>		Name	Value	Number of occupied stations	[4]	No.	Item	Result (When the following items are satisfied, enter ✓ in the blanks.)	(1)	RWr	✓	(2)	RX	✓	No.	Item	Result (When the following items are satisfied, enter ✓ in the blanks.)	(1)	RWw	✓	(2)	RY	✓
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Remarks	*1 Manufacturers need to provide the methods for checking RX, RY, RWr, and RWw to CLPA.																							
Result	Manufacturer (required) PASS	CLPA (confirmation) 																						
CC-Link Partner Association																								

Classification	1. Software test																							
Test item	1. 2. Basic function (2) Cyclic communications (Minimum number of occupied stations)																							
Test method	<p>Specify the minimum number of occupied stations with the test target station and execute cyclic communications.</p> <p>Configuration needs to follow the basic test configuration.</p> <p>Parameter setting</p> <table border="1"> <tr> <td></td><td>Number of occupied stations</td></tr> <tr> <td>Test target station</td><td>Minimum number of occupied stations of the test target station</td></tr> </table> <p>* The minimum number of occupied stations should be four or less.</p>			Number of occupied stations	Test target station	Minimum number of occupied stations of the test target station																		
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Result	Manufacturer (required)	CLPA (confirmation)																						
	PASS																							
CC-Link Partner Association																								

1.3. Control

Classification	1. Software test													
Test item	1. 3. Control (1) Cyclic start/stop indicated by master station													
Test method	<p>Confirm that the test target station corresponds to the cyclic start/stop of the master station by executing the cyclic communication. Configuration needs to follow the basic test configuration. The setting of each station needs to be the same as "Basic function (Cyclic communications (Maximum number of occupied stations))".</p> <p>The method of starting cyclic is as follows: (1) Start cyclic communications with the test target station with the conformance test tool. The method of stopping cyclic is as follows: (1) Stop cyclic communications with the test target station with the conformance test tool.</p>													
Judgment criteria	<p>Check the following.* 1 As responses to the cyclic stop command: (1) The link status of the conformance test tool turns off. (2) Data link of the test target station stops, and data is not transmitted. As responses to the cyclic start command: (3) The link status of the conformance test tool turns on. (4) Data link of the test target station starts, and data is transmitted.</p> <table border="1"> <thead> <tr> <th>Item</th><th>Result</th></tr> </thead> <tbody> <tr> <td></td><td>When the process is completed properly, enter ✓ in the blanks below.</td></tr> <tr> <td>(1)</td><td>✓</td></tr> <tr> <td>(2)</td><td>✓</td></tr> <tr> <td>(3)</td><td>✓</td></tr> <tr> <td>(4)</td><td>✓</td></tr> </tbody> </table>		Item	Result		When the process is completed properly, enter ✓ in the blanks below.	(1)	✓	(2)	✓	(3)	✓	(4)	✓
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(2)	✓													
(3)	✓													
(4)	✓													
Remarks														
Result	Manufacturer (required)	CLPA (confirmation)												
	PASS													
CC-Link Partner Association														

Classification	1. Software test													
Test item	1. 3. Control (2) Cyclic start/stop to host station													
Test method	<p>Confirm that the test target station corresponds to the cyclic start/stop of the host station by executing the cyclic communication in case that the host station can execute the cyclic start/stop.</p> <p>Configuration needs to follow the basic test configuration.</p> <p>The setting of each station needs to be the same as "Basic function (Cyclic communications (Maximum number of occupied stations))".</p> <p>Follow the cyclic start/stop methods provided by the manufacturers.</p>													
Judgment criteria	<p>Check the following.</p> <p>As responses to the cyclic stop command of the test target station:</p> <p>(1) The link status of the conformance test tool turns off.</p> <p>(2) Data link of the test target station stops, and data is not transmitted.</p> <p>As responses to the cyclic start command of the test target station:</p> <p>(3) The link status of the conformance test tool turns on.</p> <p>(4) Data link of the test target station starts, and data is transmitted.</p> <table border="1" data-bbox="493 1010 959 1207"> <thead> <tr> <th>Item</th><th>Result</th></tr> </thead> <tbody> <tr> <td></td><td>When the process is completed properly, enter ✓ in the blanks below.</td></tr> <tr> <td>(1)</td><td></td></tr> <tr> <td>(2)</td><td></td></tr> <tr> <td>(3)</td><td></td></tr> <tr> <td>(4)</td><td></td></tr> </tbody> </table>		Item	Result		When the process is completed properly, enter ✓ in the blanks below.	(1)		(2)		(3)		(4)	
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(4)														
Remarks														
Result	Manufacturer (option)	CLPA (confirmation)												
CC-Link Partner Association														

Classification	1. Software test																							
Test item	1. 3. Control (3) Host station control according to the operating status of the master station																							
Test method	<p>Confirm that the test target station operates properly according to the operating status of the master station.</p> <p>Configuration needs to follow the basic test configuration.</p> <p>The setting of each station needs to be the same as "Basic function (Cyclic communications (Maximum number of occupied stations))".</p> <p>The following shows how to change the operating status of the master station. (1) Change the host station module information of the master station with the conformance test tool.</p>																							
Judgment criteria	<p>Confirm that the test target station operates properly according to the operating status of the master station (host station module information).</p> <table border="1"> <thead> <tr> <th>Protocol version</th><th>Host station module information of the master station</th><th>Operation of the test target station(*2)</th><th>Result (*1)</th></tr> </thead> <tbody> <tr> <td rowspan="2">1</td><td>0x0001: Operating</td><td>Not supported</td><td>✓</td></tr> <tr> <td>0x0000: Stopped</td><td>Not supported</td><td>✓</td></tr> <tr> <td rowspan="3">2</td><td>0x0001: Operating</td><td>Operating</td><td>✓</td></tr> <tr> <td>0x0002: Stopped by user operations</td><td>Stop</td><td>✓</td></tr> <tr> <td>0x0000: Stopped due to errors (or initialization)</td><td>Error</td><td>✓</td></tr> </tbody> </table> <p>*1: When the process is completed properly, enter ✓ in the corresponding field. When the process is not supported, enter "Not supported".</p> <p>*2: Enter the proper operation of the test target station according to the operating status of the master station. When the operation is not supported, enter "Not supported". Examples) Hold/clear output, continue/stop operation, detect/not detect alarms</p>			Protocol version	Host station module information of the master station	Operation of the test target station(*2)	Result (*1)	1	0x0001: Operating	Not supported	✓	0x0000: Stopped	Not supported	✓	2	0x0001: Operating	Operating	✓	0x0002: Stopped by user operations	Stop	✓	0x0000: Stopped due to errors (or initialization)	Error	✓
Protocol version	Host station module information of the master station	Operation of the test target station(*2)	Result (*1)																					
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	0x0000: Stopped due to errors (or initialization)	Error	✓																					
Remarks																								
Result	Manufacturer (required)	CLPA (confirmation)																						
	PASS																							
CC-Link Partner Association																								

Classification	1. Software test	
Test item	1. 4. Error processing (1) Master station duplication	
Test method	<p>Confirm that the test target station sends a master station duplication error response when a new master station was added in the network during cyclic communications and cyclic communications are executed to the test target station.</p> <p>Configuration needs be the following.</p> <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Network during cyclic communications</p> <p>IP address : 192.168.3.39 Subnet mask : 255.255.255.0</p> <div style="border: 1px solid black; padding: 5px; margin: 5px;"> <p>Master station 1 CC-Link IE Field Basic conformance test tool (master station)</p> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">Hub</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;"> <p>Test target station (slave station)</p> </div> </div> <div style="border: 1px dashed black; padding: 5px; text-align: center;"> <p>Add this station</p> <p>IP address : 192.168.3.40 Subnet mask : 255.255.255.0</p> <div style="border: 1px solid black; padding: 5px; margin: 5px;"> <p>Master station 2 CC-Link IE Field Basic conformance test tool (master station)</p> </div> </div> </div>	

Classification	1. Software test							
Test item	1. 4. Error processing (2) Master station disconnection							
Test method	<p>Confirm that the test target station detects a disconnection of the master station when the master station has been disconnected.</p> <p>Configuration needs to follow the basic test configuration.</p> <p>The following shows how to disconnect the master station.</p> <p>(1) Interrupt cyclic communications of the conformance test tool.</p>							
Judgment criteria	<p>Confirm the following.</p> <p>(1) The test target station detects a disconnection of the master station.* 1</p> <table border="1" data-bbox="491 779 999 902"> <tr> <td>Item</td><td>Result</td></tr> <tr> <td></td><td>When the process is completed properly, enter ✓ in the blanks below.</td></tr> <tr> <td>(1)</td><td>✓</td></tr> </table>		Item	Result		When the process is completed properly, enter ✓ in the blanks below.	(1)	✓
Item	Result							
	When the process is completed properly, enter ✓ in the blanks below.							
(1)	✓							
Remarks	*1 Manufacturers need to provide the method for checking a detection of the master station duplication of the test target station to CLPA.							
Result	Manufacturer (required)	CLPA (confirmation)						
	PASS							
CC-Link Partner Association								

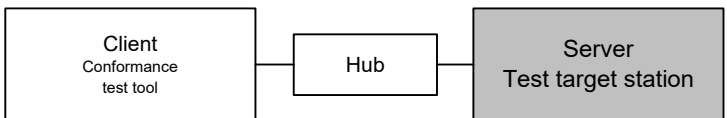
Classification	1. Software test										
Test item	1. 4. Error processing (3) Slave station ID duplication										
Test method	<p>Confirm that the test target station detects a slave station ID duplication error when a cyclic request whose cyclic transmission status is on is received with a master station not specified. Confirm that the test target station does not execute cyclic communications when a slave station ID duplication has been detected.</p> <p>Configuration needs to follow the basic test configuration.</p> <p>The following shows how to generate a slave station ID duplication error.</p> <p>(1) Set the cyclic transmission status to Forced on with the conformance test tool and start cyclic transmissions.</p>										
Judgment criteria	<p>Confirm the following.</p> <p>(1) The test target station detects an error. * 1</p> <p>(2) The link status of the conformance test tool does not turn on.</p> <table><tr><td>Item</td><td>Result</td></tr><tr><td></td><td>When the process is completed properly, enter ✓ in the blanks below.</td></tr><tr><td>(1)</td><td>✓</td></tr><tr><td>(2)</td><td>✓</td></tr></table>			Item	Result		When the process is completed properly, enter ✓ in the blanks below.	(1)	✓	(2)	✓
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Remarks	*1 Manufacturers need to provide the method for checking error detection of the test target station to CLPA.										
Result	Manufacturer (required)	CLPA (confirmation)									
	PASS										
CC-Link Partner Association											

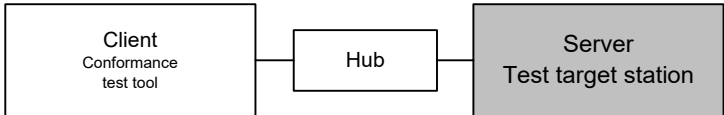
Classification	1. Software test											
Test item	1. 4. Error processing (4) Specification of the number of occupied stations not supported by the test target station											
Test method	<p>Confirm that the test target station sends an error response when the number of occupied stations not supported by the test target station is specified.</p> <p>Specify the number of occupied stations not supported by the test target station with the conformance test tool and execute cyclic communications.</p> <p>* When the test target station supports all the number of occupied stations of 1 to 16 stations, do not conduct this test.</p> <p>Configuration needs to follow the basic test configuration.</p>											
Judgment criteria	<p>Confirmation of the number of occupied stations used for the test</p> <p>Check the following parameter used in the test.</p> <table border="1"> <thead> <tr> <th>Name</th><th>Value</th></tr> </thead> <tbody> <tr> <td>Number of occupied stations</td><td>[]</td></tr> </tbody> </table> <p>Confirm the following.</p> <p>(1) The conformance test tool receives an error about the number of occupied stations.</p> <table border="1"> <thead> <tr> <th>Item</th><th>Result</th></tr> </thead> <tbody> <tr> <td></td><td>When the process is completed properly, enter ✓ in the blanks below.</td></tr> <tr> <td>(1)</td><td></td></tr> </tbody> </table>		Name	Value	Number of occupied stations	[]	Item	Result		When the process is completed properly, enter ✓ in the blanks below.	(1)	
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Remarks												
Result	Manufacturer (option)	CLPA (confirmation)										
CC-Link Partner Association												

1.4. Performance measurement

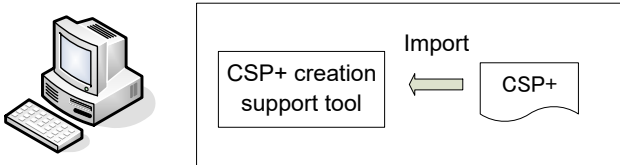
Classification	1. Software test																
Test item	1. 5. Performance measurement (1) Reference response time measurement																
Test method	<p>This test measures the reference response time of the slave station (test target station) during cyclic communications between the slave station and the master station (conformance test tool).</p> <p>Configuration needs to follow the basic test configuration. The setting of each station needs to be the same as "Basic function (Cyclic communications (Maximum number of occupied stations))". The test period is 1,000 cycles.</p> <p>The reference response time of the slave station is the time taken from when the master station (conformance test tool) sends a request to the slave station to when the master station receives the response to the request.</p> <div><div><div>Master station (conformance test tool)</div><div>Slave station (test target station)</div></div><div><div>Request (1)</div><div>Response (1)</div></div><div><div>Reference response time</div><div>Cyclic request</div><div>Cyclic response</div></div></div>																
Judgment criteria	<p>Measure the reference response time of the cyclic communications with the conformance test tool.</p> <table><tr><td>Name</td><td>Monitor value</td><td>Data</td></tr><tr><td rowspan="3">Reference response time</td><td>Average value</td><td>[0.733]</td></tr><tr><td>Maximum value</td><td>[3.884]</td></tr><tr><td>Minimum value</td><td>[0.404]</td></tr></table> <p>Model name of the switching hub used (*1)</p> <table><tr><td>Item</td><td>Model name</td></tr><tr><td>Switching hub used</td><td>Hirschmann SPIDER 5TX Rail Switch E175531</td></tr></table>			Name	Monitor value	Data	Reference response time	Average value	[0.733]	Maximum value	[3.884]	Minimum value	[0.404]	Item	Model name	Switching hub used	Hirschmann SPIDER 5TX Rail Switch E175531
Name	Monitor value	Data															
Reference response time	Average value	[0.733]															
	Maximum value	[3.884]															
	Minimum value	[0.404]															
Item	Model name																
Switching hub used	Hirschmann SPIDER 5TX Rail Switch E175531																
Remarks	*1 Write the model of the switching hub used because the performance differs depending on models.																
Result	Manufacturer (required)	CLPA (confirmation)															
	PASS																
CC-Link Partner Association																	

1.5. Access to device information

Classification	1. Access to device information																																																															
Test item	1. 6. Access to device information (1) Detecting a connected device																																																															
Test method	<p>Send a "NodeSearch command" from the conformance test tool to the test target station by broadcast, and confirm if it operates properly.</p> <p>Configuration needs be the following.</p> <div style="text-align: center;">  <pre> graph LR A[Client Conformance test tool] --- B[Hub] B --- C[Server Test target station] </pre> <p>* The port number of the server should be "61451".</p> </div>																																																															
Judgment criteria	<p>Write the response from the test target station and the execution results checked with the conformance test tool in the table below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Item name</th><th colspan="2">Binary</th></tr> <tr> <th>Value</th><th>Result*1</th></tr> </thead> <tbody> <tr><td>MAC address of the client</td><td>[C8F75085AD29]</td><td>✓</td></tr> <tr><td>Size of the client IP address</td><td>[4]</td><td>✓</td></tr> <tr><td>IP address of the client</td><td>[C0A80308]</td><td>✓</td></tr> <tr><td>MAC address of the server</td><td>[3CB9A6200530]</td><td>✓</td></tr> <tr><td>Size of the server IP address</td><td>[4]</td><td>✓</td></tr> <tr><td>IP address of the server</td><td>[C0A80363]</td><td>✓</td></tr> <tr><td>Subnet mask of the server</td><td>[FFFFFFF0]</td><td>✓</td></tr> <tr><td>Default gateway IP address of the server</td><td>0xFFFF FFFF</td><td>✓</td></tr> <tr><td>Size of the server host name</td><td>0x00</td><td>✓</td></tr> <tr><td>Host name of the server</td><td>No</td><td>✓</td></tr> <tr><td>Vendor code of the server</td><td>[4338]</td><td>✓</td></tr> <tr><td>Model name code of the server</td><td>[37C5CD31]</td><td>✓</td></tr> <tr><td>Device version of the server</td><td>[2]</td><td>✓</td></tr> <tr><td>IP address size of the external device</td><td>0x04</td><td>✓</td></tr> <tr><td>IP address of the external device</td><td>0xFFFF FFFF</td><td>✓</td></tr> <tr><td>Communication port number of the external device</td><td>0xFFFF</td><td>✓</td></tr> <tr><td>Server status</td><td>[0]</td><td>✓</td></tr> <tr><td>Communication port number of the server</td><td>[F00B]</td><td>✓</td></tr> <tr><td>Communication protocol setting of the server</td><td>0x01</td><td>✓</td></tr> </tbody> </table> <p>*1 When the process is completed properly, enter ✓ in the blanks below.</p>		Item name	Binary		Value	Result*1	MAC address of the client	[C8F75085AD29]	✓	Size of the client IP address	[4]	✓	IP address of the client	[C0A80308]	✓	MAC address of the server	[3CB9A6200530]	✓	Size of the server IP address	[4]	✓	IP address of the server	[C0A80363]	✓	Subnet mask of the server	[FFFFFFF0]	✓	Default gateway IP address of the server	0xFFFF FFFF	✓	Size of the server host name	0x00	✓	Host name of the server	No	✓	Vendor code of the server	[4338]	✓	Model name code of the server	[37C5CD31]	✓	Device version of the server	[2]	✓	IP address size of the external device	0x04	✓	IP address of the external device	0xFFFF FFFF	✓	Communication port number of the external device	0xFFFF	✓	Server status	[0]	✓	Communication port number of the server	[F00B]	✓	Communication protocol setting of the server	0x01	✓
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Result	Manufacturer (required)	CLPA (confirmation)																																																														
	PASS																																																															
CC-Link Partner Association																																																																

Classification	1. Access to device information																																	
Test item	1. 6. Access to device information (2) Setting the IP address of the connected device																																	
Test method	<p>Send an "IPAddressSet command" from the conformance test tool to the test target station by broadcast, and confirm if it operates properly.</p> <p>Configuration needs be the following.</p> <div style="text-align: center;">  <pre> graph LR A[Client Conformance test tool] --- B[Hub] B --- C[Server Test target station] </pre> <p>* The port number of the server should be "61451".</p> </div>																																	
Judgment criteria	<p>Write the response from the test target station and the execution results checked with the conformance test tool in the table below.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th rowspan="2">Item name</th><th colspan="2">Binary</th></tr> <tr> <th>Value</th><th>Result*1</th></tr> </thead> <tbody> <tr> <td>IP address to be set to the server</td><td>[]</td><td></td></tr> <tr> <td>Subnet mask to be set to the server</td><td>[]</td><td></td></tr> <tr> <td>Default gateway IP address to be set to the server</td><td>0xFFFF FFFF</td><td></td></tr> <tr> <td>Size of the host name size to be set to the server</td><td>0x00</td><td></td></tr> <tr> <td>Host name to be set to the server</td><td>No</td><td></td></tr> <tr> <td>IP address size of the external device</td><td>0x04</td><td></td></tr> <tr> <td>IP address of the external device</td><td>0xFFFF FFFF</td><td></td></tr> <tr> <td>Communication port number of the external device</td><td>0xFFFF</td><td></td></tr> <tr> <td>Communication protocol setting to be set to the server</td><td>0x01</td><td></td></tr> </tbody> </table> <p>*1 When the process is completed properly, enter ✓ in the corresponding field.</p>		Item name	Binary		Value	Result*1	IP address to be set to the server	[]		Subnet mask to be set to the server	[]		Default gateway IP address to be set to the server	0xFFFF FFFF		Size of the host name size to be set to the server	0x00		Host name to be set to the server	No		IP address size of the external device	0x04		IP address of the external device	0xFFFF FFFF		Communication port number of the external device	0xFFFF		Communication protocol setting to be set to the server	0x01	
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Remarks	All Result fields of the judgment criteria should be marked with ✓.																																	
Result	Manufacturer (option)	CLPA (confirmation)																																
CC-Link Partner Association																																		

2. Profile description (CSP+) confirmation

Classification	2. Profile description (CSP+) confirmation	
Test item	2. 1. Confirmation of formats	
Test method	<p>Import a CSP+ file into the CSP+ creation support tool provided by CLPA to check the CSP+ file format.</p>  <pre> graph LR A[Computer] --- B[CSP+ creation support tool] C[CSP+] -- Import --> B </pre>	
Judgment criteria	Import a CSP+ file into the CSP+ creation support tool to check the formats, and confirm that no error occurs.	
Remarks		
Result	Manufacturer (conducted)	CLPA (confirmation)
	PASS	
CC-Link Partner Association		

Classification	2. Profile description (CSP+) confirmation				
Test item	2. 2. Confirmation of indispensable items				
Test method	Import a CSP+ file into the CSP+ creation support tool provided by CLPA. Visually check the description of indispensable items of the CSP+ file.				
	Section	Component name	Confirmation content	Manufacturer (fill in contents)	CLPA
	FILE	CreateDate	The file creation date is described correctly.	2023/08/23	
		CreateTime	The file creation time is generated correctly.	14:00:00	
		ModDate	The last update date is described correctly.	2023/08/23	
		ModTime	The last update time is described correctly.	13:59:00	
		Language	The language information is described correctly. (English: "en")	en	
		CCLinkFamilyProfileVersion	The CSP+ specification version is described correctly. (Version 2.1 or later)	2.2	
		FileVersion	The file version is described correctly.	1.0	
	DEVICE	VendorName	The vendor name is described correctly.	Belden Deutschland	GmbH
		VendorCode	The vendor code is described correctly. (The fifth to eighth digits of the partner number)	0x4338	
		DeviceModel	The model name is described correctly.	0980 XSL 3912-121-027	D-01F
		Version	The device version is described correctly.	0x0002	
		VersionDisplayFlg	Display/non-display of the device version is set correctly. (0: Non-display, 1: Display)	1	
		VersionPolicyType	The policy of the device version is described correctly. 0: Use always the latest CSP+ file 1: Use the CSP+ file with the same version as the one of the device used 2: Use the CSP+ file that is the previous version of the one of the device used	2	
	COMM_IF	VendorName	The vendor name is described correctly.	Belden Deutschland	GmbH
		VendorCode	The vendor code is described correctly. (The fifth to eighth digits of the partner number)	0x4338	
		CommIFTypeID	The communication interface ID ("Ethernet") is described correctly.	Ethernet	
		Version	The device version is described correctly.	0x0001	
		ReadVersionType	"MachineVersion" is described correctly.	MachineVersion	
		DevModel	The model name is described correctly.	0980 XSL 3912-121-027	D-01F
		NumOccupiedStations	The number of occupied stations is described correctly. (Integer of 1 to 64)	4	
	EthernetCommFunction	The CC-Link IE Field Network Basic communication function (bit1) is set to Installed (1).	2		
Judgment criteria	The values of the above indispensable items are described correctly.				
Remarks	The manufacturer must submit the confirmed contents (values and character strings of items) to CLPA.				
Result	Manufacturer (conducted)		CLPA (confirmation)		
CC-Link Partner Association					

3. Aging test

Classification	3. Aging test							
Test item	3. 1. Aging test							
Test method	<p>Conduct this test continuously for 12 hours. Confirm that the product operates without any problem during 12-hour continuous execution of cyclic communications.</p> <p>The following describes the test configuration. The test target station*1 supporting a line topology should conduct the aging test by using all the ports at the same time. Set the maximum number of occupied stations of the test target station. Also, set the following parameters of the test tool.</p> <p>*1: The test target station has two or more Ethernet connector ports and supports the repeat function among the ports (switching function).</p> <div style="text-align: center;"> <pre> graph LR MS[Master station CC-Link IE Field Basic conformance test tool (master station)] --- H[Hub] --- TTS[Test target station (slave station)] </pre> </div> <p><Test target station supporting a line topology></p> <div style="text-align: center;"> <pre> graph LR MS[Master station CC-Link IE Field Basic conformance test tool (master station)] --- H[Hub] --- TTS[Test target station (slave station)] --- SS[Slave station CC-Link IE Field Basic conformance test tool (slave station)] </pre> </div> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Item</th><th style="width: 40%;">Value</th></tr> </thead> <tbody> <tr> <td>Time-out time</td><td>500 ms</td></tr> <tr> <td>No. of continuous time-out counts until detection of a disconnection</td><td>3</td></tr> </tbody> </table>		Item	Value	Time-out time	500 ms	No. of continuous time-out counts until detection of a disconnection	3
Item	Value							
Time-out time	500 ms							
No. of continuous time-out counts until detection of a disconnection	3							
Judgment criteria	<p>Confirm that the product can operate continuously for 12 hours or more. (1) No disconnection occurs during cyclic communication. (The test target station supporting a line topology confirms that the slave station connected at the end is not disconnected.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Item</th><th style="width: 85%;">Result</th></tr> </thead> <tbody> <tr> <td></td><td>When the process is completed properly, enter ✓ in the blanks below.</td></tr> <tr> <td>(1)</td><td style="text-align: center;">✓</td></tr> </tbody> </table>		Item	Result		When the process is completed properly, enter ✓ in the blanks below.	(1)	✓
Item	Result							
	When the process is completed properly, enter ✓ in the blanks below.							
(1)	✓							
Remarks								
Result	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Manufacturer (required)</th><th style="width: 50%;">CLPA (confirmation)</th></tr> <tr> <td style="text-align: center;">PASS</td><td></td></tr> </table>	Manufacturer (required)	CLPA (confirmation)	PASS				
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PASS								
CC-Link Partner Association								